

**Turn taking, repair and topic practices in teaching assistant led
literacy intervention sessions**

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Abstract

This research explored the learning experiences of pupils during literacy intervention sessions in English primary schools, by examining the moment-by-moment interactions between teaching assistants and pupils. Teaching assistants have taken increasing responsibility for teaching and learning, including the teaching of group intervention sessions aimed at supporting those pupils not making expected progress in literacy. The effectiveness of any intervention is reliant on the moment-by-moment interactions as social-constructivist theory indicates that it is in these interactions that shared meaning is negotiated and scaffolding provided. However, there is a lack of research into how this occurs in the interactions between teaching assistants and pupils generally, and specifically during these intervention sessions.

The research took a multiple-case study approach. Fine grained linguistic analysis of observation based empirical data in the form of video recordings of intervention sessions provided the basis for theory development. This was done through the analytical framework of conversation analysis, situated within the broader field of linguistic ethnography.

The research identified that interactions are strongly focused on the organisational principles of the task and task completion, rather than developing the learning experiences of individual pupils and the group. Teaching assistants provide high levels of support, leading to potential pupil reliance on this support due to a lack of development of interactional and metacognitive skills for self and reciprocal scaffolding.

The research has implications for policy in relation to provision for pupils who are falling behind in literacy. It is argued that a theory of oral pedagogy needs to be developed which can be used to clarify the pedagogical role of the teaching assistant, and there needs to be continuing professional development for teaching assistants in order to improve the quality of their moment-by-moment interactions with pupils.

I hereby declare that, except where explicit attribution is made, the work presented in
this thesis is entirely my own.

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Chapter 1 Introduction

This chapter will set out the focus and aims of the study undertaken, together with a rationale for these in relation to education theory, policy and practice. It will also give an overview of the design of the study, together with a brief explanation of, and rationale for, the analytical approach used.

The study is an investigation of the interactions between teaching assistants (TAs) and small groups of pupils during literacy intervention sessions in mainstream English primary schools. The role of TAs has changed significantly over the past 20 years. Initially, they tended to be parent helpers, who for the most part offered practical support to the teacher; the most direct involvement in terms of pupils' learning experiences would often be to hear individual pupils read in an informal way (Clayton, 1993). However, due to government policy developments (in particular the National Workload Agreement of 2003) the role has become formalised and TAs now have employed status within schools and significant responsibility for learning and teaching (Blatchford *et al*, 2009c). This change has not however been adequately accompanied by consistent articulation in national policy of the pedagogical role of TAs in relation to deployment; training and support; and monitoring of the impact of their work (Blatchford *et al*, 2009b; Howes *et al*, 2003; Russell *et al*, 2005). Although government policy exists in relation to each of these areas, it is not statutory, and local arrangements at Local Authority (LA) and school level vary widely in relation to each of these areas (Hutchings *et al*, 2009; Johnson *et al*, 2004; Russell *et al*, 2005). A cause for concern is that TAs (who are not as qualified or trained to the same extent as teachers) have become increasingly responsible for supporting pupils who are achieving below the expected level for their age and are therefore at risk in the education system (Blatchford *et al*, 2009c; HMI, 2002). It has been demonstrated that there is a consistent negative relationship between the amount of support a pupil receives from TAs and the academic progress they make, even when controlling for factors such as Special Educational Need (SEN) status and socioeconomic factors (Blatchford *et al*, 2009a). Therefore, investigating the learning experience of pupils when working with TAs is of utmost importance in order to make changes to practice which will improve pupil outcomes.

A significant role which TAs often hold is teaching literacy intervention sessions. The National Literacy Strategy (NLS) (DfEE, 1998) was introduced in 1998 to raise standards in literacy over a five to ten year period, and tackle ‘a relatively greater tail of under-achievement than is found in many other countries’ (Beard, 2000, p. 4). The focus of the NLS was on a daily literacy hour which included a substantial amount of whole class teaching. Three ‘waves’ of support were suggested for pupils who were falling behind their peers in literacy, with the expectation that there would be a decreasing number of pupils moved to the next wave (The National Strategies, 2007). Wave 1 (‘quality first teaching’) was within class differentiation by the teacher. Wave 2 (for those pupils for whom Wave 1 had not enabled them to catch up with their peers) consisted of the teaching of small groups, using scripted intervention materials, provided by TAs. Wave 3 was a one to one intervention. The education system is at the current time in a state of transition in England. A conservative/liberal coalition government came to power in May 2010. Although the Primary National Strategies (PNS) were disbanded in 2011, the general principle of three waves of support remains in place, and the intervention materials continue to be used in primary schools. The coalition government has indicated that intervention programmes will remain as part of the literacy support provided by schools (DfE, 2010b; DfE, 2011).

Rose (2009), in a government commissioned review into the identification and teaching of children and young people with dyslexia and literacy difficulties, restated the three wave approach as the most appropriate way to structure provision for pupils who are falling behind their peers, whilst he also made a cautionary statement in relation to interventions:

‘In order to recover lost ground and close their gap with their peers who are meeting the target levels for attainment, the rate of progress for those children often has to be doubled’

(p. 42).

This means that ensuring quality learning experiences for pupils during interventions is of paramount importance. In relation to Wave 3, Brooks (2002) provides an overview of the effectiveness of a range of interventions based on test data, using ratio gains to measure impact. However, only tentative conclusions are drawn due to the significant variance in factors and available data. Some Wave 3 interventions such as the ‘reading

recovery' programme have been widely researched and established as effective in supporting pupils falling behind in reading (Brooks, 2002; Tanner *et al*, 2011). However, these are taught by qualified teachers with significant specialist training.

There is however a lack of research into the impact of the work of TAs in relation to Wave 2 interventions. Only a small number of in depth studies have shown the impact of literacy and numeracy interventions led by TAs, using before and after test score data (reviewed in Alborz *et al*, 2009) and these have been experimental design studies, testing new interventions rather than using existing Wave 2 interventions. There is also a lack of research into the moment-by-moment interactions between TAs and pupils (i.e. what actually happens *during* intervention sessions). Scripted materials are provided by the DfES (now the DfE) for intervention sessions at key stage 1 (Early Literacy Support), and key stage 2 (Additional Literacy Support and Further Literacy Support) and some LAs have produced their own. Unless it is presumed that: (1) it is possible for a TA to follow a script and fail to deviate from it whatever the responses from pupils, and (2) locally made adaptations during the session are not desirable and will not support pupils' learning, it is interpretations and adaptations of these materials realised through talk-in-interaction which will lead to the progress, or lack of progress, of groups and individuals. It is only in this way that the provision can respond to individual needs. However, there have been no studies of how TAs interpret and adapt the materials in their interactions with pupils and the impact on pupils' moment-by-moment learning experiences. For pupils who are underachieving, intervention sessions led by TAs may be the only form of additional support that they receive, and therefore the lack of research in this area is of concern. Wave 2 is the key point at which pupils can be supported to 'catch up' with their peers, or are identified as having significant difficulties. Ensuring that Wave 2 is as effective as possible would mean that a higher proportion of pupils would not require Wave 3, and those moving to this stage would be more reliably assessed as having significant needs.

There is research on the organisation of talk between teachers and pupils in whole class situations, and some in group work situations. This has established that there is a dominant organisation of discourse which is described as the IRF (Initiation-Response-Feedback) pattern (Sinclair and Coulthard, 1975) or IRE (Initiation-Response-Evaluation) (Cazden, 2001). From this point this will be referred as the IRE/F pattern.

Reasons for the IRE/F pattern being prevalent may include the need to control interactions, as there are such a large number of participants in a whole class teaching situation (Nassaji and Wells, 2000). This teacher directed whole class interaction, with its established features, is the genre given authority by both teachers and pupils. However, ‘interthinking’ (Mercer, 2000) and ‘dialogic talk’ (Alexander, 2005) are considered in social-constructivist theory to be more appropriate in relation to teaching and learning in that they offer greater opportunities for scaffolding (Wood, Bruner and Ross, 1976). These types of discourse are more genuine and more equal in terms of organisation and contributions by participants.

From a social-constructivist perspective therefore, it is the moment-by-moment interactions which provide scaffolding in relation to learning goals. However, although there is an empirical literature on the scaffolding of pupils’ learning through talk there is little with a focus on TAs and pupils. The ways in which talk between TAs and pupils during group literacy intervention sessions is organised is currently unknown. Information about what occurs during these interactions is required in order to evaluate these practices in relation to the pupils’ learning experience.

The aims of the research were therefore:

1. To explore the moment-by-moment interactions between TAs and pupils during literacy intervention sessions in order to develop theory in this area.
2. To make recommendations for policy and practice.
3. To add to the body of knowledge in the broader area of classroom interactions.

Aim 1 was achieved through exploring three specific aspects of talk-in-interaction (the organisation of turn-taking; the management of repair; and the management of topic) in order to build theory in relation to these learning and teaching interactions. The study of the exact nature of the talk-in-interaction between participants is the key to understanding pupils’ learning experiences during these episodes. This understanding can only be gained through beginning to build a body of knowledge in this area based on cumulative analysis of studies, to which this research will contribute. Aim 2 offers recommendations based on this theory development in relation to the practice of

individual TAs and those that train and deploy them on a local level; and in relation to the broader policy decisions which will need to be made in this area. Aim 3 recognises that theoretical and research literature in the area of classroom interactions generally is closely related to the issue under investigation, and there is likely to be much to be gained from making links between the two. The research questions are presented following the literature review.

The study belongs broadly in the field of linguistic ethnography. It used observational data of naturally occurring episodes (all in the context of group literacy intervention programmes led by TAs). The overall design was a multiple-case study, with each TA and group of pupils being considered as a case. It would not be appropriate to attempt to impose general theories of teacher-pupil classroom interaction to the specific context of TA led intervention sessions; it was necessary instead to explore and begin to build theory in an area which is not currently represented in existing research through using an inductive approach. Conversation Analysis (CA) was used as an analytical framework. This was most appropriate approach as it allowed for close analysis of how participants in the interaction orient to each other on a turn by turn basis. Two aspects of talk-in-interaction were selected as initial foci as they were of particular relevance to the context of the study. These were the organisation of talk (specifically, turn bidding and turn selection) and scaffolding of pupils' learning (specifically repair practices and practices used for the management of topic).

Chapter 1 has explained the focus and aims of the study, setting these in the context of relevant education theory, policy and practice. It has also provided an overview of the design of the study and the analytical approach used. Chapter 2 will set out relevant literature in relation to: the developing role of the TA (including a discussion of literature in relation to effectiveness and impact of their work); social constructivism (with a particular focus on the notion of scaffolding); and classroom interactions (including literature available in relation to TA and child interactions). Chapter 3 firstly sets out a rationale for the methodology, data collection methods and analytical approach chosen. It then provides details of the practical steps undertaken at each stage of the research process. Chapters 4, 5, 6 and 7 set out the results of the study. Chapter 4 discusses findings in relation to turn bidding and turn selection. Chapter 5 is focused on repair strategies, specifically other initiated repair. Chapters 6 and 7 provide

findings in relation to topic: chapter 6 covers topical pursuit, curtailment and relevance and chapter 7 is concerned with over-cueing via visual and non-verbal practices. The findings are discussed in greater detail in chapter 8, and the implications for policy and practice are considered. Finally, chapter 9 provides a brief summary of the project, together with reflections on the research design and a consideration of the ways in which the research may be taken forward. A list of the acronyms and capitalisations used throughout the thesis can be found in appendix 1.

Chapter 2 Literature review

2.1 Introduction

The following chapter is divided into three sections. The first section considers the historical development of the role of TA and the issues which have been raised in literature in relation to this development. Most significantly, the literature in relation to the effectiveness and impact of the work of TAs will be discussed both in general and in relation to literacy interventions. This locates the study within what is currently known about the interactions between TAs and pupils and provides material for discussion in relation to possible reasons for the findings, and implications for, this study.

The second section on talk and learning discusses the theories and concepts which form the social constructivist approach to teaching and learning that underpins the overall approach taken in this study. Of particular importance is the notion of scaffolding, which can only be achieved in the moment-by-moment interactions which this study analyses.

Lastly, the section on classroom interaction considers the empirical research which has been carried out in the area of classroom interaction, with a focus on the established IRE/F structure and how this relates to turn organisation, repair and topic (the three specific aspects of interaction which are the foci of this study). It also considers the limited literature which is available in relation to the moment-by-moment interactions between TAs and pupils. Finally the section discusses the position of talk within the NLS and PNS materials, as the intervention materials used in half of the case studies form part of this package.

2.2 Teaching assistants

There is a long history in the United Kingdom (UK) of adults other than teachers working in schools in roles which have direct contact with pupils. Rather than TA being a term for a group of people employed to take on a specified, monitored and consistent role, the role is one which grew in an *ad hoc* way on a local basis (Clayton, 1993). Following the National Workload Agreement of 2003 the numbers of TAs grew at a swift pace. Figures from early published data are difficult to compare with more

recent figures, due to the changing classification of different types of adult support (such as minority ethnic support staff). However, figures from the DfE (2011a) show that in January 2005, in publically funded Nursery and Primary schools, there were 164,400 TAs (including special needs support staff and minority ethnic support staff), rising to 209,900 in November 2010, demonstrating a significant rise. The number of TAs at this point was close to the total number of teachers employed in these schools (which stood at 235, 400). Despite attempts by the government since the Workload Agreement to clarify and standardise aspects of the role, there has continued to be a lack of consistency in the deployment; training and support; and monitoring of the impact of the work of TAs on pupils' learning (Blatchford *et al*, 2009b; Howes *et al*, 2003; Russell *et al*, 2005).

It has been generally accepted that TAs make a positive contribution, without there being a comprehensive research base for this observation (Alborz *et al*, 2009). However, the Deployment and Impact of Support Staff (DISS) project, a large, longitudinal, naturalistic, and multi-method study has now provided evidence that there is a consistent negative relationship between the amount of support received by a pupil and progress in all three core subjects (English, mathematics and science), even after controlling for other factors (Blatchford *et al*, 2009a). There is now a need for ongoing and rigorous studies in order to fully establish the role and impact of TAs in relation to teaching, learning and pupil achievement. As Blatchford *et al* (2009b, np) conclude:

'More work on conceptualising the pedagogical roles of TAs in their everyday interactions with pupils is required and needs to be built into professional development, school deployment decisions and the management, support and monitoring of support staff'.

The DISS project has offered a broad insight into within classroom support, with data now being used to study in detail the interactions between TAs and pupils (Radford, Blatchford and Webster, 2011; Rubie-Davies *et al*, 2010). No study however has yet studied the moment by moment interactions between TAs and pupils during intervention sessions.

2.2.1 Deployment: the developing role

In 1998 a survey of 549 primary head teachers and 767 classroom assistants found that the most common title for adults other than teachers working in classrooms was

classroom assistant, although at least twelve other job titles were found to be in common use (Lee and Mawson, 1998). This reflected a growth in the numbers of adults working in very varying capacities within classrooms; some being employed specifically to work with individual pupils, others acting as general support for teachers and with minimal pupil contact. By 2000 the government had produced a guide for schools describing good practice with regard to the use of TAs. It was clearly stated within this that the government's preferred term was 'teaching' assistant: 'The term captures the 'active ingredient' of their work' (DfEE, 2000, p.5) (although the term 'Learning Support Assistant' (LSA), for adults employed to work with specific pupils remained in government documentation such as the SEN code of practice (DfES, 2001b)). The term TA has become the most widely used term for adults employed on contracts based around general duties and working with groups of pupils and/or individuals, becoming a generic term for classroom-based posts which cover similar activities such as 'classroom assistant, higher level teaching assistant, learning support assistant, and nursery nurse' (Blatchford *et al*, 2011, p. 443).

This change in title reflects a definite change in the roles undertaken by TAs, although as Blatchford *et al* (2009a) found:

'Role definition is complex and appears to transcend policy statements. Instead, support roles are shaped in the light of perceptions, expectations, deployment decisions and practices of teachers.'

(p. 60)

As far back as 1993, Clayton asserted that the role of classroom assistant had moved: 'from care and housekeeping to substantial involvement in the learning process itself' (Clayton, 1993, p. 42). This is a trend which has continued, with a number of survey based studies and reviews of literature highlighting the point. Moyles and Suschitzky (1997) and Schlapp, Wilson and Davidson (2001) summarised these changes in terms of a change in support, from supporting the teacher in an auxiliary role, to a role focusing on the support of the pupils themselves. The DfEE highlighted the TA's role in: supporting inclusion; keeping pupils on task; assisting individuals; acting as a role model; and freeing up the teacher to work with groups, by supervising the class (DfEE, 2000).

One of the major policy developments to impact on the role of TAs was the National Workload agreement in January 2003 which was signed by all teaching unions except the National Union of Teachers. Specified work for TAs now could include planning and preparing lessons; delivering lessons; assessing and recording; and reporting. This could be with individuals, groups or whole classes (DfES, 2003c). This represented a fundamental shift in the role of the TA, and formally indicated a shift from 'support' to 'teaching'. The role could now include many of the responsibilities of a class teacher, although studies such as Kessler, Bach and Heron (2007) found that using TAs for the 'core' role of whole class teaching was rare. The government also took steps to encourage TAs to move into teacher training (DfEE, 2000), with a Higher Level Teacher Assistant (HLTA) qualification designed by the Learning and Skills Council (the body responsible at the time for funding and planning education and training for over 16-year-olds in England) to facilitate this transfer (LSC, 2004). This raised interesting questions about whether the TA role should be seen as a distinct pedagogical role, or as a replacement/supplementary teacher. Mansaray (2006) argued that the government's remodelling policies placed TAs on the periphery of the teaching and learning process unless they were trained to a higher status, a deficit model that presumed that the 'dynamism and ambiguity of the role needs to be normalised, institutionalised and made coherent' (p. 174), and ignoring the fact that TAs may already be playing a key role in teaching and learning. Mansaray warned against the formalising of categories which suggested 'teachers' and 'others'. However, by 2009 it was no longer the case that TAs 'may' be playing a key role in teaching and learning; TA support of pupils far outweighed support for teachers, with 88% of TAs time being spent in this role (Blatchford *et al*, 2009c). On average this equates to almost four hours of a TA's day (Webster *et al*, 2010a). The role of the TA is therefore clearly now established as a pedagogical one, raising further questions about how and whether the roles of teacher and TA should overlap. This question becomes all the more urgent when one considers some of the key findings from the DISS project.

Firstly, the workload of TAs has increased since workforce remodelling and TAs working unpaid extra hours is 'widespread' (Blatchford *et al*, 2009c, p. 99), with two thirds of TAs carrying out planning, preparation and feedback in their own time. Clearly these activities are not being formally recognised as part of the TA role, but are

being carried out, indicating a lack of willingness on the part of schools to acknowledge that staff being asked to undertake a pedagogical role need time to prepare appropriately for this. The introduction of designated Planning, Preparation and Assessment (PPA) time of 10% of timetabled teaching time in 2005 as part of the workforce remodelling initiative acknowledged this in relation to teachers. However, this has not been introduced for TAs despite them being expected to take on teaching responsibilities; less than one quarter were found to have been allocated time for planning or feedback with class teachers (Blatchford *et al*, 2009c). This is congruent with the finding in the same project that the deployment of TAs is based on pragmatic considerations rather than any theoretical or conceptual ones.

Secondly, and particularly worrying, are findings that schools are often unaware of the amount of time that pupils with SEN spend with TAs (as opposed to being supported by a qualified teacher) (Blatchford *et al*, 2009a; Blatchford *et al*, 2004; HMI, 2002). This is a continuing trend, with Webster *et al* (2010a) noting that:

‘TA support for pupils with learning needs more accurately represents an ‘alternative’ to the teacher; it is not, as is often described, ‘additional’ to teacher input.’

(p. 330)

Within primary schools TAs often work with small groups of pupils (Blatchford *et al*, 2009a; Blatchford *et al*, 2004; Lee and Mawson, 1998; Moyles and Suschitzky, 1997) although gathering information on which pupils TAs are working with is not straightforward. A 2002 review of research and literature indicated that TAs were increasingly working with small groups of pupils rather than being attached to specific individual pupils (Lee, 2002). However, in a survey of 327 schools carried out in 2004, head teachers most frequently reported that TAs worked with individually specified pupils (Smith, Whitby and Sharp, 2004). The survey in this case included both primary and secondary schools, and the different classroom groupings commonly found in the two different educational stages need therefore to be taken into account when interpreting the results. However, this apparent inconsistency may also be related to there being pupils with statements for SEN (who have TA support hours allocated to them); in reality, the TA is likely to work with a group which contains these pupils, rather than offering one to one support. Blatchford *et al* (2004) and Russell *et al* (2005)

carried out case studies which found that individual pupil and group support may overlap. Group support was found to be the strategy most in use in primary schools (Blatchford *et al*, 2009a). It could be argued that this has potential benefits both for the pupil, in that it may encourage less direct dependence on the specific adult. It may also have benefits for other pupils in the class who may be having similar difficulties but do not have allocated support hours. However, the DISS project found that TAs are over used in supporting lower ability pupils and pupils with SEN, and often work with these pupils outside of the classroom (at least one third of the TA's time was spent with groups in this way). This was particularly the case in English and mathematics lessons in primary schools. This has the effect of developing dependency and 'separating the pupils from the teacher, the curriculum and their peers' (Blatchford *et al*, 2009a, p. 89) (this will be considered further in the later discussion on the impact of the work of TAs).

Alborz *et al* (2009) in their review of literature on the impact of support staff split direct support of pupils into 'general' support and 'targeted' support. A clear example of targeted support which often forms part of the work of TAs in primary schools is involvement in the delivery of intervention programmes for literacy and numeracy; on average 40 minutes of a TA's time every day is spent on leading an intervention programme. Findings from the DISS study were that almost all schools used TAs to deliver intervention sessions:

'a number of TAs were fully responsible for planning such lessons, the tasks for which were also often inappropriate. TAs who planned intervention sessions often chose procedural activities at the expense of tasks that developed pupils' conceptual knowledge.'

(Blatchford *et al*, 2009a, p. 104).

It is unclear whether the sessions observed included the Early Literacy Support and Additional Literacy Support programmes (which are scripted sessions produced by the government, specifically designed to be delivered by TAs outside of the classroom with small groups of pupils identified as falling behind their peers). Arguably these should not require planning by the TA because detailed plans and resources are provided. This raises pedagogical questions about whether there are differences between 'delivery' and 'teaching', and the extent to which TAs should be involved in the planning and

assessing of intervention sessions. A study by Dunne, Goddard and Woodhouse (2008) suggests that TAs reflecting on their experiences prior to joining a foundation degree programme felt that they: ‘just delivered a DfES product and personal judgement or skill was not necessary to this task’ (pg. 53). This is supported by Cable, Eyres and Hancock (2006) who claim that the view of literacy across the NLS materials represents an ‘autonomous’ model (that literacy can be broken down into component parts to be transmitted), and note that:

‘Previous discussions with TAs have given us the strong impression that they increasingly see themselves as links in a chain of transmission, ‘delivering’ literacy.’

(p.2).

Webster *et al* (2010a) have argued strongly for teachers to take back the responsibility for lesson by lesson planning for pupils, both in terms of curriculum and pedagogical planning: ‘and in particular, the intervention programmes given to TAs to deliver away from the classroom’ (p. 330), drawing particular attention to their legal duties in relation to this. Causton-Theoharis *et al* (2007) argue for a team model, drawing an analogy between the role that TAs should have and that of ‘sous chefs’ who:

‘are not responsible for planning the meals, are not afforded the autonomy to adapt the recipes, and do not do the majority of the cooking.’

(p. 56).

They argue that all of these responsibilities are those of the executive chef (the teacher). The TA should not therefore be asked to introduce any new material to pupils and ‘should not be put in the inappropriate position of making pedagogical decisions’ (p. 58).

It can be argued however that TAs can and do assume ‘teaching rights’ in relation to the assessment of pupils’ responses, and related adaptation of materials and scripts *during the session*. It is difficult, without investigation into the detailed interactions taking place, to conclude whether TAs do not recognise the extent to which they are making moment-by-moment pedagogical decisions (which is suggested by the findings of Cable, Eyres and Hancock (2006)), or that this is actually not occurring. Seedhouse (2010) suggests that this is extremely unlikely, having established that (in second

language classrooms) there is often a significant difference between what he calls ‘task-as-workplan’ and ‘task-in-progress’ (intended pedagogy and the actual pedagogy) because small variables can make significant differences in the task-in-progress, and these variables cannot easily be predicted in advance. The conclusion of a literature review on the perceptions of the TA role (Cajkler *et al*, 2006) was that there is a further need to investigate the use of scripted materials and the extent to which TAs make pedagogical decisions when working alone with pupils. However, it is not only the extent of these decisions, but the exact nature of how they are developed in the interaction which is of importance in relation to pupils’ learning experiences. Tharp and Gallimore (1988) suggest that the goals and sub goals of an activity need to be constantly renegotiated during that activity, demanding a high level of subject knowledge of the adult:

‘Without such knowledge, teachers cannot be ready to assist performance, because they cannot quickly reformulate the goals of the interaction; they cannot map the child’s conception of the task goal onto the subordinate knowledge structures of the academic discipline that is being transmitted.’

(p. 35).

The authors of the DISS project advocate taking a step back and reconsidering whether TAs should have a pedagogical role at all. However, when the views of practitioners (school leaders, teachers, SENCos, trainers and LA advisors) were sought by the researchers on possible ways forward in light of the findings, they note that some of the suggestions:

‘presuppose that TAs continue to act as the default providers of teaching to pupils with learning needs (e.g. in terms of leading interventions for literacy and numeracy).’

(Webster, Blatchford and Russell, 2010, p. 2).

This suggests that the practice of the deployment of TAs in some pedagogical capacity, particularly in relation to interventions which have been introduced and used in schools for a number of years, is unlikely to change. Training and support for TAs in relation to both subject knowledge and pedagogical decision making are therefore vital.

2.2.2 Training and support

The descriptions related to the status of HLTAs might be expected to offer some insight into the difference between the TA role and that of a teacher. HLTA status was clearly seen by the Labour government of 1997-2010 as a route into qualified teacher status. The assessment was 'light-touch and school-based' (LSC, 2004), and a list of standards provided which HLTAs were assessed against (TTA, 2003). When the Qualified Teacher Status (QTS) standards were reviewed in 2007, the HLTA standards were also reviewed to keep in line with these (TDA, 2007b). They detail the skills, knowledge and understanding that a HLTA should be able to demonstrate, split into three categories: Professional attributes; Professional knowledge and understanding; and Professional skills (split into the further three areas of: Planning and expectations; Monitoring and assessment; and Teaching and learning activities). These standards linked directly to the standards which trainee teachers had to meet (TDA, 2007a). This could potentially produce 'fast-tracked' school trained teachers (with models of practice limited to the school trained in), but not TAs with a clear pedagogical understanding of *their role as a TA*.

It should be noted that HLTA is a status, not a qualification. However, links were made between formal qualifications available to TAs and QTS. The School Workforce Development Board (SWDB) aimed to encourage greater uptake of relevant National Vocational Qualifications (NVQs), as well as offering pathways which lead to specialist support qualifications (SWDB, 2006). It can be noted that the plan made clear that 'the strategy is aligned with the standards for teachers' (p. 16). Watkinson (2003) describes a possible continuum of expectations and competencies, suggesting that a TA could take a foundation degree in 'teaching assistance', which would then be followed by two years as a registered teacher to achieve QTS (Watkinson, 2003). There is, however, a tension in Watkinson's work, as she clearly sees the TA role in terms of a developing continuum leading to QTS, whilst at the same time suggesting that TAs bring 'a different set of skills and background knowledge to that of the teacher' and 'TAs are professionals in their own right' (np). She goes on to recognise the need for an established pedagogy for TAs. If this is the case then it is essential that foundation degrees are not seen as simply a route to teaching, but as a way of establishing the role of TA as an important but distinctly different role to that of a teacher. There should, of

course, be opportunities for TAs who may want to take up teaching as a profession to do so, but their role should not be seen as a 'teacher in waiting' one. Concerns have been expressed that TA recruitment should not be allowed to make up for the teacher shortfall (Neill, 2002). Of equal concern is that the teacher shortfall may be eased through TAs becoming inadequately prepared teachers through gaining HLTA status then QTS. Johnson *et al* (2004) caution against this view however, and a 2009 report indicated that only 22% of primary school TAs reported being interested in gaining QTS (Hutchings *et al*, 2009). This is supported by the findings of the DISS project, which notes that a 'minority' of HLTAs were going on to teacher training (Blatchford *et al*, 2009c). Kessler, Bach and Heron (2007) and Dunne, Goddard and Woodhouse (2008) found that there are a number of barriers which TAs perceive to be preventing them moving in the direction of becoming qualified teachers, such as age, ongoing domestic responsibilities, a lack of self-confidence, and local cultural expectations.

There appears to be something of a paradox here, in that much of the literature suggests ways in which TAs are similar to teachers, whilst being keen to emphasise that they are not to be considered as such. Ofsted for example state that: 'Although no one should pretend that teaching assistants are teachers, when they are most successful they show many of the skills characteristic of good teachers' (HMI, 2002, p. 18). There is much less emphasis on what makes the role of a TA specifically different, a crucial consideration if one is to attempt to monitor their work and plan appropriately for their professional development. Aylen (2007, pg. 108) suggests that: 'TAs are there to help children learn, and thus teach (in broad terms, rather than with the specific skills of a teacher, as described by Berliner, 1992)'. In order to carry out their role, HMI (2002) consider that TAs require appropriate subject knowledge, questioning skills and behaviour management skills. This reflected government findings at the time that 'the types of training TAs have themselves regularly indicated they want are heavily competency based' (DfEE, 2000, p. 35), a finding supported by later studies (Schlapp, Wilson and Davidson, 2001; Smith, Whitby and Sharp, 2004). Whereas some head teachers consider there to be a set of 'essential personal aptitudes' required by TAs (Blatchford *et al*, 2004, p. 45), which cannot be acquired through training, the DfEE state that: 'all the skills of an effective TA can be taught' (DfEE, 2000, p. 34). Crucially, the emphasis here is on the skills, rather than a deeper pedagogical

understanding of the role. This is a serious issue as research suggests that TAs tend to model themselves on the teachers that they work with (Cable, Eyres and Hancock, 2006; Collins and Simco, 2006; Edmond, 2003), sometimes adopting an ‘over emphasis on ‘performance’ aspects of teaching rather than deeper understanding’ (Moyles and Suschitzky, 1997, p. 5). This may particularly be the case where TAs are not sufficiently supported in terms of developing subject knowledge and reflecting on practice, or are inadequately briefed by a teacher. In this case:

‘they sometimes become more concerned with the completion of the task rather than the improvement in pupils’ knowledge, skills, and understanding’

(HMI, 2002, p. 8-9).

That little progress has been made in relation to supporting TAs to develop appropriate subject knowledge and pedagogical knowledge and skills is shown by the DISS project and related studies of TA and pupil interactions which found that TAs sometimes displayed incorrect subject knowledge and gave confusing explanations, frequently supplied answers to pupils, and were overly concerned with task completion (Blatchford *et al*, 2009a; Radford, Blatchford and Webster, 2011; Rubie-Davies *et al*, 2010)

A 2004 report commented that a range of training courses were available locally and nationally for TAs, but that it was difficult to establish what the take up of these had been. It also established that: ‘information on the professional development needs of support staff is patchy’ (Johnson *et al*, 2004, pg. 9). A fuller picture of the education and training received by TAs was established by the DISS project survey which tracked this over time (Blatchford *et al*, 2009c). It found that in the final 2008 data collection 60% of TAs had attended non-school INSET (IN-Service Training) and 65% had attended other education and training, with 42% attending education or training leading to an award. However, all of these percentages had decreased since the 2006 data collection. Importantly however, the study found that over 90% of TAs attend school INSET, which suggests this as a possible way forward. It is unclear however how many sessions of INSET were attended by TAs (it may have been a ‘one off session’ or regular weekly INSET), and whether this INSET was specifically designed for TAs or was undertaken with teachers. INSET that includes both teachers and TAs would have to be carefully designed to support both roles and to take into account the various

starting points of individuals involved. This would be unlikely to fit with the INSET models currently found in schools. Importantly, the 2008 survey found that 83% of TAs were satisfied with the training they received, and only 1% of schools thought that more training was needed for support staff. When set against the DISS evidence of poor subject knowledge and poor quality interactions with pupils, this suggests a mismatch between the provision of training and monitoring of the understanding and application of this training and/or an ‘assumption that less pedagogical skill is required when teaching pupils with SEN; if anything, a higher level of skill is needed’ (Webster *et al*, 2010a, p. 334).

In itself, the provision of opportunities for TAs to undertake studies leading to a higher qualification may not be the answer, as this has been found to not have an impact on pupil progress (Blatchford *et al*, 2004). In addition, the provision of grants for TAs to undertake training leading to HLTA status was cut by the government in 2010, and it would seem unlikely that schools or TAs will fund these themselves. Several studies highlight the need for reflection on practice as a way for supporting the professional development of TAs (Collins and Simco, 2006; Cremin, Thomas and Vincett, 2005; O'Brien and Garner, 2001). These suggest that TAs are able to engage in high level reflection and that this leads to improvements in practice. Tharp and Gallimore (1988) suggest that teachers (and in this case TAs) need to have their performance assisted if they are to develop the ability to assist the performance of the pupils they work with. However, the DISS project found that, in addition to there being a lack of time provided for teachers and TAs to liaise, teachers were overwhelmingly under prepared for their role in training and developing TAs; although over half were involved in this the ‘majority’ had had no training for this role. Even line managers of support staff were generally unprepared for this role, with only one third having received any training (Blatchford *et al*, 2009c). TAs were found to obtain subject and pedagogical knowledge ‘in the moment’ during lessons, usually from teachers’ whole class input, and ‘TA administered marking and assessment seemed to go unchecked by teachers’ (p. 87). Therefore, although it may be tempting to provide more training to TAs to ‘fix’ weaknesses in subject knowledge and pedagogical skills and understanding, a longer term and more sustainable model is needed. Webster *et al* (2011) argue that:

‘the need to prepare teachers to work with and manage TAs through formal initial training and professional development is paramount; there is little use in providing more time for teachers to liaise with TAs if it results in the same models of deployment and practice that lead to negative learning outcomes’

(p. 13).

There is one area however in which the DISS project is clear that TAs need formal training. That is in the leading of intervention sessions. They found that in 2006 only 11% had received curriculum specific training, rising to 16% in 2008. As this included all specific curriculum training, the figures related to literacy would be expected to be lower than this. Rather than being trained specifically in relation to the required subject knowledge and pedagogical principles related to literacy learning ‘TAs were often expected to rely on prescribed materials’ (Blatchford *et al*, 2009a, p. 81). Webster *et al* (2011) argue that if TAs are to continue to teach intervention sessions, they must have formal training, and that this should take into account the fact that teaching pupils with SENs requires as much if not more pedagogical skills, meaning that ‘a key consideration will be the extent to which TAs will need to become pedagogical experts’ (p. 15). Rose also highlighted the training and support of those teaching intervention sessions as ‘crucial’ (Rose, 2009, p. 19), suggesting that the government should explore ways that HLTAs might become specialist trained in Wave 2 and 3 reading interventions.

TAs provided with training and support during the Every Child a Reader (ECaR) project reported that observing teaching and ‘practical’ sessions are particularly beneficial, and have also responded positively to the opportunity to share experiences and best practice (Tanner *et al*, 2011). This does again raise the issue of whether the focus of training should be on skills and competencies, or deeper pedagogical understanding. Arguably, these experiences provide the former, but would need to be carefully structured to ensure the latter. The study found that TAs lost confidence if there was a gap between training and starting to teach the intervention; this could suggest that they are focusing on accurately imitating the teaching techniques observed.

2.2.3 Effectiveness and impact: general

Until recently, the research literature into the effectiveness and impact of TAs on pupil progress was very limited and had a number of omissions. Until the findings of the DISS project were published (Blatchford *et al*, 2009a) there had been a general lack of research into how pupil progress is affected by TAs, and of the studies carried out in this area most were focused on the perceptions of teachers and TAs rather than examining observational data (Alborz *et al*, 2009).

Blatchford *et al* (2009d) discuss the lack of clarity in government policy about whether TAs should have a direct or indirect impact on pupil attainment. However, HMI in 2002 aimed to evaluate the quality and impact of the work carried out by TAs, based on two lesson observations (either literacy or numeracy) and interviews with TAs and their managers in each of 67 schools, with the focus on ‘the effect teaching assistants were having on the quality of teaching and pupils’ progress’ (HMI, 2002, p. 4), suggesting that certainly by this stage they were being expected to have a direct impact. At this point, evidence was based on observational evidence of TAs working alongside a teacher within the whole class context and concluded that the presence of TAs improves the quality of teaching, although this was only when they worked in close partnership with a class teacher. HMI also concluded that when TAs worked on tightly prescribed intervention programmes then outcomes were positive, although it is difficult to ascertain how they reached this conclusion as no intervention sessions were observed. They also found that deployment, monitoring and support of TAs was inconsistent and head teachers ‘seldom take sufficient account of their qualifications and subject knowledge’. (p. 13). Lee (2002) notes that generally the impact of TAs was widely reported as positive, particularly with regard to the NLS and National Numeracy Strategy (NNS), although these conclusions were based on teachers’ perceptions of impact on teaching and learning, rather than attainment. There was little evidence that TAs were being included in monitoring and evaluation procedures in schools.

By 2008, the situation had improved somewhat. The majority of TAs had job descriptions and the number of TAs who received appraisals had risen significantly to 69% (Blatchford *et al*, 2009c). Schools also appeared to have begun to shift their focus to the impact that support staff were having. Ofsted found that monitoring and

evaluation of the impact of the wider workforce had improved (Ofsted, 2008). The improvements that appear to have been made however are undermined by some worrying figures. Ofsted (2008) found that only one third of the schools visited were able to demonstrate clear impact; and the DISS project (Blatchford *et al*, 2009c) found that no school measured TA impact on a lesson by lesson or term by term basis. Blatchford *et al*. also found that a third of support staff did not have a line manager, and 31% of TAs did not have any appraisal. The line management and performance management of TAs were also more likely to be informal in nature. Both reports indicate that there is a need for better monitoring, evaluation and professional development in this area.

American research in 2001 (Gerber *et al*) concluded that TAs have little, if any, positive impact on pupil attainment. The history and growth of the role of TAs, as explained in the article, suggested that the findings may be applicable to the UK context. In the UK, a growing body of evidence has been concluding that the situation here is similar. The Gatsby Mathematics Enhancement Programme Primary Project, evaluated by Muijs and Reynolds (2003), was targeted at low achieving pupils (as identified by the schools) in KS1, across 18 schools in two LAs. TAs were given a total of six training days, and four follow on meetings to clarify issues and discuss problems. The project benefited from being able to compare 180 pairs of pupils from those who had received TA support and those who had not (matched by factors such as gender, social disadvantage, ethnicity, and SEN status). One year into the project no effect of being supported in numeracy by a TA was found. The report concludes that there is a need for a study of the differential behaviour of TAs, involving qualitative observations of them at work.

Also in the UK, Howes, Farrell, Kaplan and Moss (2003) concluded that paid adult support shows no consistent or clear overall effect on class attainment scores. Similarly, Blatchford *et al* (2004) found no evidence of impact on pupil attainment in relation to general classroom support in the areas of literacy, numeracy and science in years 4-6 (although it found that pupils were more likely to take an active part in sessions when a TA was present, a finding supported by Cremin, Thomas and Vincett (2005) in relation to literacy sessions). Having taken into account a range of possible variables with regards to the TAs involved (for example, qualifications and experience), the study concluded that 'there is no evidence of a significant effect of extra staff/TAs in the

classroom upon progress' (*ibid* p. 63). The point is made that the study was based on classroom observation – intervention sessions taken by TAs alone were not observed. It is acknowledged that neither the: 'content or quality of the TA/pupil interactions' (*ibid* p. 66) was examined, and the study concludes that:

'a thorough investigation of the effectiveness of TAs, involving close study of the moment by moment interactions between TAs and pupils, is long overdue'

(*ibid*).

Following visits to 23 schools, Ofsted in 2008 concluded that: 'The wider workforce was having a greater impact on pupils' achievement and well-being than identified in previous surveys' (Ofsted, 2008, p. 5), whilst acknowledging that the baseline set in their previous reports was low: 'Although schools were convinced that such deployment benefited pupils, few could provide clear evidence to support their view' (p.7).

However, the completion of the DISS project, the largest and most complex longitudinal, naturalistic, and multi-method study to date, has given the most conclusive evidence on the impact of TA support on pupil progress. The project showed that there was a consistent negative relationship between the amount of support received and progress in all three core subjects (English, mathematics and science), even after controlling for other factors such as level of SEN and previous attainment (Blatchford *et al*, 2009a). The 'Wider Pedagogical Role Model' developed by Blatchford, Russell and Webster (2012) offers persuasive explanations for the findings of the project, grouped under the headings: characteristics; preparedness; conditions of employment; deployment and practice – areas which have been discussed in this chapter. The DISS findings have dramatically shifted the picture from a perception of gradual improvement to extreme concern, and in relation to classroom interactions, led Rubie-Davis *et al* (2010) to conclude that: 'models of effectiveness when applied to teachers will also need to be applied to TAs' (p. 446).

There is obviously a need however to separate the concepts of direct and indirect impact. There is strong evidence of positive impact on teachers' workload, job satisfaction, and stress (Blatchford *et al*, 2009a) which may indirectly impact on pupil progress by improving the quality of teaching. In terms of the benefits to the teacher of having a TA working in the classroom, these have been identified as including: support

for behaviour management; support in organising the class; resources; ‘having another pair of eyes to pick up and monitor pupils’ responses’; and discussing ideas (HMI, 2002, p.8). Many studies have been keen to point out that the real impact of the role of TAs may not lie in pupil attainment levels, but in much less tangible but equally relevant areas. For example, they may play a unique mediating role between the pupil’s culture and community and the school/dominant culture (Howes, 2003; Logan and Feiler, 2006; Mansaray, 2006). TAs are much more likely to belong to local communities than teachers, and are therefore uniquely placed to do this (Kessler, Bach and Heron, 2007). The Classroom Assistant Project (Woolfson and Truswell, 2005) carried out in Scotland funded five additional TAs for 8 months in 5 Primary 1 classes across three schools and studied the impact on pupils. Some weaknesses in the project are identified (particularly the lack of training given to the TAs). However, it concludes that there were positive effects, in that it improved the pupils’ ‘learning experiences’ (*ibid* p. 71). Interestingly, this term differs from the phrase which is used in the project’s aims: ‘improving the quality of learning’ (*ibid* p. 65). The change can possibly be attributed to the lack of quantitative data collected (which Woolfson and Truswell highlight as an area in which conclusive evidence is lacking, but do not seek to address). It also noted a positive impact on pupils’ personal and social development. High on the list of perceived strengths is that the TAs ‘supported learning on all levels, providing more individual and group work’ (*ibid* p. 71). This is presented as an unquestionable positive; although there is some observational data presented, this focuses on strategies identified as being used by TAs, and these are presented in very broad terms, such as ‘helping groups during whole-class teacher-led lesson’ (*ibid* p. 73). There is no breakdown of the type of help, or detailed examination of the talk-in-interaction between the TAs and pupils. The DISS project found that there was ‘little evidence that the amount of support received by pupils over a school year improved their ‘Positive Approaches to Learning’ (PAL)’ (Blatchford *et al*, 2009a, p. 34) in any of the primary years. The PAL measures were for: distractibility, task confidence, motivation, disruptiveness, independence, relationships with other pupils, completion of assigned work, and following instructions from adults. Each was scored by the class teacher in relation to the progress they perceived each pupil to have made over the previous year. However, there were improvements in all eight areas for pupils who received support in year 9; the researchers therefore consider that this might be one area

which could be built on, adding weight to the argument for a non-pedagogical role being considered for TAs.

2.2.4 Effectiveness and impact: literacy intervention sessions

Although Blatchford *et al* (2004) question the use of TAs for intervention programmes due to their qualifications and pedagogical experience being less than those of qualified teachers, Alborz *et al* (2009) found that the majority (7 out of 8) of the research reports included in a systematic literature review reported a positive impact on pupil attainment. In particular, studies have focused on reading interventions which involve the development of a small number of specific aspects of reading (for example, aspects of synthetic phonics). They conclude that: ‘progress was more marked when TAs supported pupils in discrete well defined areas of work on particular aspects of learning’ (p. 20). This, they suggest, indicates that TAs are most effective when trained to deliver robust intervention programmes. There is a set of studies which examine the effectiveness of specific intervention projects, generally literacy interventions, delivered by TAs (Downer, 2007; Hatcher *et al*, 2006b; Savage and Carless, 2008; Savage, Carless and Stuart, 2003). These tend to be experimental in design, relying on pre and post intervention test data. Little attention is paid to the interactions during the sessions, instead isolating the intervention project itself as the factor under examination and viewing the TA as simply part of the mode of delivery.

Focused on a nine week intervention programme designed to support KS1 pupils at risk of reading difficulties in nine schools, a study by Savage, Carless and Stuart (2003) trained TAs for one morning to use materials designed to improve early reading skills such as onset and rime and phoneme awareness (a consideration of each TA’s ‘starting point’ in terms of awareness of literacy issues is not included). Weekly visits were made to schools to observe TAs teaching, and to clarify issues and difficulties raised. The study concludes that:

‘without major changes to the curriculum per se, and with a modest budget, briefly training the formally unqualified teaching staff available in schools produces significant changes in early literacy-related skills’

(Savage, Carless and Stuart, 2003, p. 227).

A later study by Savage and Carless (2008) showed similar results with TAs using published phonics programmes, also showing that the effects were maintained over time. Hatcher *et al* (2006a) showed that gains were made and maintained by pupils who took part in a reading intervention programme, and Downer (2007) also found that precision teaching by TAs in relation to sight vocabulary had a positive effect on academic achievement. More recently, the Nuffield Language4Reading project (Fricke *et al.*, 2011) used trained and supported TAs to deliver a 30 week intervention bridging nursery and reception, in order to develop children's oral language skills to improve their reading outcomes. At the time of writing this early intervention is still in its final evaluation stage, but has been shown to have significant positive effect on developing literacy skills across a range of standardised language and literacy test measures immediately post intervention. This built on reviews of earlier randomised control trials, and it is argued by Snowling and Hulme (2012) that:

‘It may not matter who delivers an intervention; what matters more is that an evidenced-based intervention is chosen that fits the child's additional needs and that the person delivering it is properly trained and supported.’ (p. 33).

However, not all results of studies have been positive, with Gray *et al* (2007) finding that a targeted phonics programme implemented by TAs had no effect on pupil attainment, and that perceptions of effectiveness of the intervention relied on the relationship between the teacher and the TA.

These interventions were based on specific ‘skills training’ techniques, rather than on broader interactions between TAs and groups of pupils. This is likely to mean these types of programmes will be readily acceptable to teachers as Blatchford *et al* (2004) found that there is a: ‘teachers' belief that reiteration, repetition and 'drilling', in particular, are ways that adults can help pupils learning and are aspects that can be delegated to TAs’ (p. 34). This is clearly therefore a possible way forward, but may run the risk of what Causton-Theoharis *et al* (2007) refer to as the ‘training gap’, where the teacher assumes that the training provided is all that is needed for the TA to run the programme and fail to engage in ongoing liaison and support.

This is a concern which clearly underlies the conclusion of Hatcher *et al* (2006a) that:

‘It remains to be established, however as to whether teaching assistants are able to demonstrate understanding of the concepts underlying the programme in addition to being able to follow its structure’

(p. 364).

Recent research suggests that conceptual understanding can certainly not be guaranteed in relation to TAs currently working in schools (Blatchford *et al*, 2009a). This once again raises the issue of whether it is possible to deliver a ‘script’ without making pedagogical decisions. Cajkler *et al* (2006) raise the specific question: ‘To what extent is their support work for literacy and numeracy scripted or independently constructed?’ (p. 52). The intervention programmes discussed suggest that with training, and when dealing with a very narrow set of skills and following highly prescriptive programme there can be a positive impact on progress. However, in order to maximise impact a full conceptual and pedagogical understanding would be necessary; this would allow for the most effective scaffolding of the learning of individuals and the group. Rather than simply ‘delivering’, the materials would be ‘fine tuned’. Rose (2009), despite arguing for highly structured phonics programmes, acknowledges that ‘the best work was formalised in design but taught creatively and with due regard for individual differences’ (p.20) and argues that interventions should be taught by teachers (or TAs working with such teachers) who ‘understand how to attune a programme to a child’s learning difficulties’ (p. 58). Although planning for differentiation might be done on a session by session basis through liaison between teachers and TAs, the act of scaffolding has to be done in the moment and therefore relies purely on the quality of the TA/pupil interaction. In their comparison of instructional models for reading interventions, Pinnell *et al* (1994) found that teachers who were given a shortened training programme demonstrated decisions and mediating actions which were based on procedures rather on students’ behaviours. The longer training programme for Reading Recovery (RR) led to the higher quality ‘fine tuned’ scaffolding. A more focused analysis of the talk-in-interaction could also account for differences between groups or individuals who made less progress than others despite receiving the same type of intervention programme. Pinnell *et al* (1994) concluded that ‘While application of the RR model was generally consistent, subtle differences could be detected in the focus of teacher attention’ (p. 22). Lack of qualitative data is reported as an issue generally across studies into the impact of TAs on academic attainment (Alborz *et al*, 2009).

The broader the set of knowledge and skills that a TA is expected to engage with, the more complex the pedagogical moment-by-moment decision making is likely to become. Savage and Carless (2008) point out that their intervention concerned a very discrete reading skill and recognise the need for the exploration of ‘broader forms of interventions delivered by schools’ own staff’ (p. 380); Wave 2 literacy intervention programmes such as ELS would fit into this category. All Wave 2 intervention programmes have an assessment before and after they take place, which has led to developments in the tracking of pupil performance in relation to these on a school by school basis. This, however, has been and remains patchy (Ofsted, 2009), and the need for each pupil’s progress to be ‘rigorously monitored and evaluated’ was highlighted by Rose (2009 p. 76) as a key area for development. That the new Ofsted framework in 2009 includes provision for inspectors to observe intervention sessions delivered by TAs (if this is related to an established line of enquiry) indicates the growing recognition that these sessions should form part of any evaluation of the quality of literacy provision. Rose (2009) suggested that the government ask Ofsted to survey the extent of the use of interventions, and with what impact. However, following a change in government in 2011, it is unclear whether this will occur. There has been, to date, no national study of the impact specifically of the Wave 2 intervention programmes as delivered by TAs.

The study which could be considered the most relevant is the evaluation of the ECaR programme (Tanner *et al*, 2011). ECaR was nationally rolled out in 2008, and incorporated the three wave approach from the PNS. Each LA appointed a Teacher Leader (TL), whose role was to support and monitor the programme in schools. The crucial difference between this programme and the normal provision was that the Wave 3 intervention was RR; schools had trained RR teachers, who were also expected to have a wider role supporting literacy. It is clear from the evaluation that it was the RR aspect of the programme which was the main focus of the planning, implementation and evaluation of the project. The Wave 2 interventions consisted of a range of different programmes which ‘were delivered in a more fragmented way than Reading Recovery’ (Tanner *et al*, 2011, p. 13) partly because ‘the interventions were seen as having less kudos and the staff delivering them less authority within the school’ (pp. 14-15). This was compounded by the TLs feeling poorly trained themselves in relation to the Wave 2

interventions, and the fact that RR teachers were not expected to have involvement in supporting the Wave 2 interventions during the first year. The report is able to state that 80% of pupils on the RR programme during the final year of the programme caught up with expectations, and that these gains were maintained after six months. It also concluded that ECaR as a whole improved school level reading attainment at Key Stage 1 by between 2 and 6 percentage points in the second year, and improved school level writing attainment at Key Stage 1 by between 4 and 6 percentage points in the second and third year. However, no specific figures are provided for any of the Wave 2 intervention programmes or pupils who took part in them. As the authors acknowledge, RR had dominated the ECaR programme, but is likely to be the least economically viable aspect of the programme. They suggest that: ‘there is scope for shifting the balance towards other ECaR interventions’ (p. 201). However, the evaluation itself does not offer sufficient evidence on the impact of these TA delivered intervention programmes to support the argument that this should happen. At the very least, some kind of baseline impact data needs to be identified. The most obvious Wave 2 intervention for this to be related to would be ELS, as this was the most common programme being used in ECaR schools (57% of schools used this) (Tanner *et al*, 2011). As a general point, there seems to be sufficient data in relation to Wave 1 and Wave 3 of the PNS support waves, but the monitoring and evaluation of Wave 2 is wholly lacking. This is despite the fact that it is potentially crucial in supporting pupils to catch up with their peers.

The key characteristics of effective Wave 2 interventions in relation to word reading have been summarised by Griffiths and Stuart (2011) as:

- Content – The most successful interventions are phonologically based, within a broader literacy curriculum (the ELS was revised in light of the evidence related to this in 2009);
- Delivery/Implementation – Small group delivery (3-4 pupils) can be as effective as individual tutoring; time bound interventions are necessary (the studies reviewed suggest 12 weeks); most studies involved 30 minutes a day; early intervention is the most effective;
- Personnel and programme fidelity – Well trained staff; ongoing monitoring and support; and highly structured programmes.

Again, as a key component of the effectiveness of general Wave 2 interventions such as ELS is the quality of interactions during the session, this requires the collection of observational data. The need for more research in this area has been increasingly highlighted in recent years, but has yet to be carried out. The DISS project is to be welcomed in that it has collected and analysed observational data of TAs and groups of pupils during whole class mathematics sessions, which offers insights into the interactions in this context (Blatchford *et al*, 2009a; Radford, Blatchford and Webster, 2011; Rubie-Davies *et al*, 2010). Although the authors state that the findings regarding interactions between TAs and pupils in out of classroom situations need to be treated cautiously due to the small number of sessions recorded, the analysis of the data suggests that:

‘If anything, they behave less like teachers in the sense of being less likely to organise pupils, more likely to give prompts and feedback, and less likely to explain concepts.’

(Blatchford *et al*, 2009a, p. 121)

They conclude that more follow up research needs to take place on the qualitative aspects of pupil support. Clearly, interactions during interventions should form a significant aspect of this.

It cannot be claimed that the impact of intervention sessions is solely down to the knowledge and skills of individual TAs, or the interactions between TAs and pupils. Without careful planning and monitoring to ensure integration of the intervention experiences with the curriculum, participation in intervention sessions can operate to separate pupils from the everyday classroom curriculum (Blatchford *et al*, 2009a; Ofsted, 2009). As concluded by Blatchford, Russell and Webster (2012):

‘the effects of TAs need to be seen in terms of the decisions about their deployment and preparedness, made by school leaders and teachers, which are outside of the control of TAs.’

(p. 118)

However, studying the moment-by-moment interactions between TAs and pupils during these sessions can offer insights into how the deployment and preparedness of TAs might be better organised.

2.3 Talk and learning

It is the notion that there is a direct and vital link between talk in the classroom and pupils' learning which has led to an increasing focus on this area in education theory and research. The epistemological underpinnings of this notion can be found in the general learning theories of Vygotsky. For Vygotsky, there was no inherent 'self', but rather a socially constructed self, built up through talk; both thought and language are initially social, and are then internalised (Vygotsky, 1986). Bakhtin (1984) also argued this point, highlighting that knowledge should not therefore be seen as being transmitted ready formed, but built through genuine two way dialogue. Although it has been demonstrated that translations of Vygotsky's works may be inaccurate for a range of political and practical reasons (Van der Veer and Yasnitsky, 2011) and that his work has been adapted in light of the very different social and political landscape in which is now being read (Daniels, 2008), a relatively cohesive set of Neo-Vygotskian theoretical constructs (integrating cognitive, motivational and social aspects of child development) have developed in relation to learning activity in Western educational contexts. This social-constructivist theory of knowledge has clear, and far reaching implications for current classroom practice, which have been made increasingly explicit by theorists such as Bruner (Wood, Bruner and Ross, 1976), Mercer (1995; 2000) and Alexander (2005). Key concepts which will be explored are the zone of proximal development (Vygotsky, 1978), and scaffolding (Wood, Bruner and Ross, 1976). Of particular interest in relation to this study is the importance of moment-by-moment interactions in relation to pedagogy (the study of the process of teaching and learning (Mercer, 1995, p. 72)). Here, the types of talk which have been identified as being supportive of the scaffolding process are of particular interest, including dialogic talk (Alexander, 2005), interthinking and exploratory talk (Mercer, 2000) and talk which makes the metacognitive process transparent.

2.3.1 Social constructivist theory

The roots of social constructivist theory as applied to education lie in the psychology of child development. The work of Piaget (1977), placed the emphasis on the individual to construct their own schema (mental structures which organise and connect understandings about the world), adding new information (assimilation) or adjusting information (accommodation) through 'active experimentation' (p.288) within their

environment. Interactions with others are relevant to this theory, because they can cause cognitive conflict when a child's existing schema does not match that of another, and this can cause the child to adjust their schema. Vygotsky however placed greater emphasis on the social cooperative processes, arguing that:

'Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Once these processes are internalized, they become part of the child's independent developmental achievement'

(Vygotsky 1978, p. 90).

Dialogue is the predominant catalyst for learning, as that which a child can achieve socially will later be internalised and reproduced independently.

This position is based on a wide view of learning which relates to the need to perform actions (to 'get things done'). Wertsch (1991) argues that all human action is goal oriented, and is mediated through language and tools (technical and psychological), using the term 'mediated action' to reflect this:

'Only by being part of action do mediational means come into being and play their role. They have no magical power in and of themselves'

(p. 119).

This reflects a view of language development, developed from Vygotsky by Bruner (1983) that language is developed as a way to get things done *within a specific culture*:

'it is the requirement of using culture as a necessary form of coping that forces man to master language. Language is the means to interpreting and regulating the culture.'

(p. 24).

Children learn how to achieve specific goals by performing actions which use language and other mediating tools (such as gesture and cultural artefacts) by interacting with others who have more knowledge and understanding of how to achieve these goals within the constructs of the culture; Bruner (1983) calls this the Language Acquisition Support System. Social interaction is therefore always goal oriented and always exists

in a cultural context. The socially developed (intermental) processes then work to support the development of the internal (intramental) processes of the child:

‘learning is taking place on at least two levels: the child is learning about the task, developing ‘local expertise’; and he is also learning how to structure his own learning and reasoning.’

(Wood, 1988, p. 98)

However, there is a need to be clear about what we mean by ‘culture’. Although there may exist an ‘*official* monologism, which pretends *to possess a ready-made truth*’ (Bakhtin, 1984, p.110), mediated action relies instead on developing a local context for interaction. This involves a:

‘Socratic notion of the dialogic nature of truth... Truth is not born nor is it to be found inside the head of an individual person, it is born *between* people collectively researching for truth, in the process of their dialogic interaction’

(*ibid*).

Rather than language and fixed ways of using language being transmitted to the learner, meanings and understandings are constantly negotiated on a moment-by-moment basis. There are close links here to the work of Vygotsky, in that the notion of thought and language are intertwined:

‘the idea begins to live, that is, to take shape, to develop, to find and renew its verbal expression, to give birth to new ideas, with the ideas of *others*... the realm of its existence is not individual consciousness but dialogic communication *between* consciousnesses.’

(*ibid* p. 87).

Bakhtin (1984) talks about the effect of not relating dialogically to the consciousness of others: ‘they fall silent, close up and congeal into finished, objectivized images’ (p. 68).

2.3.2 Dialogic talk

The term ‘dialogic talk’ has been developed to describe dialogue between participants in classroom talk which chains questions and answers together in a way which builds shared understandings (Alexander, 2005). This is similar to the concept of ‘interthinking’ (Mercer, 2000), which describes ‘use of language for thinking together, for collectively making sense of experience and solving problems’ (p. 1). There are four

main criteria suggested by Alexander for dialogic talk; it should be *collective, reciprocal, cumulative and supportive* (Alexander, 2003). The concept is based on that of Bakhtin (1984), and relies on an understanding of knowledge, or ‘truth’ which may in many cases run counter to that of a schooling system which relies on remembering and regurgitating ‘facts’. Key to this type of dialogue is that it relies on participants having equal power: ‘both teachers and pupils make substantial and significant contributions’ (Mercer, 2003, p. 74), and here the role of questioning is a vital one. Questions can ‘cast the responder in the role of primary knower and thereby create a more equal mode of participation’ (Nassaji and Wells, 2000, p. 381). Here the use of ‘authentic’ questions (to which the teacher does not have a pre-decided answer), together with how answers are taken up, evaluated and chained to following questions, are key skills (Skidmore, 2000).

However, Nassaji and Wells (2000) suggest that even when teachers try to introduce a more dialogic type of interaction in classrooms, the didactic form still tends to dominate. Where teachers are aware of these issues and find opportunities to develop a more equal dialogue with pupils, it is argued that this is very difficult to sustain permanently because of the role positioning which both teachers and pupils have been subject to throughout their lives which mean that default discourse structures are returned to (Edwards and Mercer, 1989). The default discourse is focused on ‘ritual learning’, which relies on both teachers and pupils following set educational ground rules. The teacher’s role is to hand over knowledge, the pupil’s role is to find the answer the teacher is expecting and put it forward in an acceptable manner.

It is important to locate the talk between TAs and pupils within this debate by exploring their interactions. There is no doubt that dialogic discourse is a particularly challenging concept in the whole class context, due to class sizes and lack of power equality in teacher/pupil relationships (Alexander, 2001). However, TAs work regularly with small groups, and the possibilities can be seen in this context for a more dialogic approach to be achieved.

2.3.3 The zone of proximal development

By highlighting the social aspect of the learning process as the key to triggering internalised developmental processes (*social* constructivism), Vygotsky raised the

possibility of children responding to a teaching programme which is ahead of their development rather than the adult than being reliant on waiting for the child to have reached a developmental stage ‘in their own time’. The key to this is Vygotsky’s concept of the ‘zone of proximal development’ (ZPD) which has become an underpinning of much recent education thinking. The ZPD of a child is:

‘the distance between the actual developmental level as determined by individual problem solving and the level of potential development as determined through problem solving under adult guidance or with more capable peers.’

(Vygotsky, 1978, p. 86)

It is important to note however, that Vygotsky’s theory should not be considered as oppositional to Piaget’s theory of stages of cognitive development:

‘With assistance, every child can do more than he can by himself – though within the limits set by the state of his development... at a certain level of complexity, the child fails, whatever assistance is provided.’

(Vygotsky, 1986, p. 187).

The ZPD does though make very clear that it is the ability (and potential ability) of the child to make use of the support offered through collaboration which is the best assessment of future intellectual development, not what the child can currently do independently (Chaiklin, 2003).

Lyle (1996) suggests that ZPD development can also happen when participants have equal status and are struggling to understand, and research has shown how pupils can be taught to talk collaboratively to this end (Wegerif *et al*, 2004). However, it is the notion that a child can be supported in moving through the ZPD by an adult which has prompted the most interest in educational circles. Tharp and Gallimore (1988) used the theory of the ZPD to derive a definition of teaching as follows:

‘Teaching consists in assisting performance through the ZPD. Teaching can be said to occur when assistance is offered at points in the ZPD at which performance requires assistance’

(p. 31).

They set out a ZPD of four stages, with stage 1 involving the assistance of a more capable other, which is gradually replaced by self assistance by the learner (through self-directed speech) before the function being acquired becomes automated or internalised. Assistance should not be offered at points at which performance does not require it; this is likely to be counter-productive. This is because the learner needs to take increasing responsibility for and control of the function in order to attain independence (move from stage 1 to stage 2 then to stage 3).

Within the educational system there will be ‘institutionally situated forms of mediated action’ (Wertsch 1991, p. 48), which will require some patterns of interaction which are different to those in pupils’ everyday contexts. Adults in these contexts have specific goals in mind which may be longer term than the goal of the immediate interaction. Part of this will be to support pupils in mediated action specifically in relation to achieving in an academic culture. An educational approach based on a Vygotskian perspective incorporates three aspects: the cognitive, the social and the cultural. In relation to literacy intervention sessions, this requires in the TA an awareness of, and the ability to support, use and develop all three aspects. Specifically, this will include:

- Literacy skills and metacognitive awareness;
- Interactional turn taking and drawing on and providing support;
- Learners’ own experiences and the context of the instructional experience.

Chaiklin (2003) argues that any adult assistance is only meaningful if it is focused on the developing functions in the child, with the aim of moving them to the next ‘age period’ (p. 57) or stage of development. Here, Bickhard (2005) helpfully differentiates between learning and development: ‘Learning focuses on in-the-moment constructions; development focuses on dependencies in trajectories of construction over time.’ (p. 168). Mercer (2000) talks of the Intermental Zone of Development (IZD), which is the mutually constructed zone of learning created and constantly renegotiated through dialogue during a specific task; this concept can be considered as shorter term than the ZPD and is therefore more useful in considering moment-by-moment teaching and learning interactions. Constructions formed become resources for future activities, and may be helpful or become a barrier – it is likely to be easier for an adult to help prevent unhelpful constructions developing than to try to undo and reconstruct unhelpful ones.

Whereas Vygotsky's ZPD is a helpful way to construct the general principle that the adult needs to assess the present position of the pupil in relation to the next developmental stage, and can support the development of maturing functions, the IZD is a more specific (shorter term) way of conceptualising the interactions which support the learner in moving through the ZPD. Even more specific are the practices of teaching specific skills or knowledge which should be referred to as 'scaffolding' (Chaiklin, 2003).

2.3.4 Scaffolding

The term 'scaffolding' (Wood, Bruner and Ross, 1976) explains the way by which a child can be effectively supported by the provision of structured help to reach a specific goal whilst still in the process of acquiring a skill or concept:

'This scaffolding consists essentially of the adult "controlling" those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence.'

(Wood, Bruner and Ross, 1976, p. 90)

Important to note here is that this does not refer to changing the task itself (making the task easier for example), but simplifying the role that the child takes in relation to the task (Greenfield, 1984). Wood, Bruner and Ross (1976) conceived of scaffolding as a four stage process, whereby the role of the tutor is:

1. 'Luring the child into actions that produce recognizable-for-him solutions' (p.96);
2. Interpreting discrepancies;
3. A confirmatory role;
4. Checking the learner out 'to fly on his own' (*ibid*).

Thus the role of the tutor is a gradually decreasing one, as the learner is allowed to take increasing responsibility for the task (although still with the option of 'checking' with the tutor) and finally allowed to carry out the task independent of the tutor. Bruner (1983) referred to this process as the 'handover principle', showing that as a general principle (in the natural game playing between mothers and their children) the adult 'provides a scaffold to assure that the child's ineptitudes can be rescued or rectified by appropriate intervention, and then removes the scaffold part by part' (p. 60). In

developing the independence and autonomy of the learner, the handover principle is a key aspect of the scaffolding concept.

2.3.5 Scaffolding in the context of schooling

The majority of early work on scaffolding was done in relation to adults interacting with individual children (whether in a ‘parent’ role in informal contexts or in a more formalised ‘tutor’ role). However, in a mainstream schooling situation the opportunities for sustained one to one adult/pupil interactions are by necessity limited. The practical problem to be overcome in a classroom context therefore becomes how one teacher working with 30 pupils can effectively scaffold learning for each of them, bearing in mind that the starting point and potential for independence for any one learner may be different to every other learner, and will vary with every activity. Granott (2005) demonstrates how the concept of scaffolding has grown and developed as it has been applied to a wider range of settings and groupings, persuasively arguing that this is beneficial. This would certainly align well with a social constructivist perspective, as the concept is taken up, used and developed through interaction in various contexts (rather than being ‘transmitted’ and treated as a fixed concept). Holton and Clarke (2006) propose an expanded concept of scaffolding, bringing together some of the key points which have been drawn out of the application of the original concept to a variety of social interactions. Of particular relevance is the suggestion that scaffolding can be:

- ‘Expert’ - a concept which remains true to the Wood, Bruner and Ross (1976) context of a one to one tutoring situation in which ‘one member “knows the answer” and the other does not’ (p. 89);
- ‘Reciprocal’ – where a group works collaboratively, drawing on their collective knowledge and understanding. Here each member ‘may take the transient role of expert’ (p. 136) but there is no one person who has all of the expert knowledge to complete the task;
- ‘Self-scaffolding’ – argued to be the same as metacognition, and including the acts of ‘metacognitive control, self-regulation, awareness, and evaluation’ (p. 133).

These could be categorised crudely as relating to ‘one to one’; ‘group’ and ‘individual’ activities. However, in reality an interaction might incorporate any combination of the

above. For example, an adult might be the ‘expert’ for a group of pupils; an individual learner will be an expert in relation to their own experiences which may become the topic for discussion; and a pupil may provide peer support during an adult led or individual activity. These categories do provide a useful basis for discussion however, as they begin to reflect the flexible ways in which the concept of scaffolding has been necessarily adapted for classroom contexts.

2.3.6 Expert scaffolding

Wood, Bruner and Ross (1976) note that any formalised programme of individualized teaching is likely to become most problematic at stage 2 (interpreting discrepancies), where the actions of the learner are more self initiated and unstructured, and responses more difficult for the tutor to interpret as they may be part of a complex series of actions which may only become apparent at the end. The adult must therefore have both a good understanding (‘theory’) of the task and how it may be completed, and a theory of the ‘performance characteristics’ of the learner at that specific moment in time:

‘Without both of these, he can neither generate feedback nor devise situations in which his feedback will be more appropriate for this tutee in this task at this point in task mastery.’

(p. 97)

This is further complicated by the fact that it is only ever the ‘zone of current development’ (Granott, 2005, p. 144) which can be observed and analysed by those working with the learner; one might see a change in what the learner can do over a period of time, but the exact nature and amount of support needed will always be a ‘best guess’ which is constantly re-assessed during the interaction (in the IZD). Wood and Middleton (1975) talk about a ‘zone of sensitivity’ – the learner must be required to do more than they are currently capable of, but should only be asked ‘to add one extra operation or decision to those he is presently performing’ (p. 182). This has implications for adults working with pupils in an educational context both in relation to their own subject knowledge, and in relation to developing an ongoing relationship with the learner over different periods (within the time of the task, and longer term in order to understand the constituent skills and knowledge that a learner may be bringing to a new task). This allows the adult to engage in ‘domain contingency... decisions about what to teach next in response to local circumstances’ (Wood and Wood, 1996),

requiring the chaining together of interactional turns, so that the child's progress is constantly monitored through their responses and any difficulties addressed through the adult's (scaffolding) responses. Bliss, Askew and Macrae (1996) found that practical activities with tangible outcomes were easier for teachers to scaffold than abstract concepts; causes included teachers' own poor subject knowledge and lack of understanding of the purpose of the lesson.

The ways in which an adult might intervene (direct the learner towards a task activity) were categorised by Wood and Middleton (1975) as a hierarchy, with level 5 (modelling) being the highest level of support, followed by preparing materials and preparing them for assembly (level 4), indicating the materials required (level 3), providing specific verbal instructions (level 2) and the lowest level of support (level 1) being the provision of general verbal instruction. They instructed the mothers that took part in their study to follow the pattern: 'If the child succeeds, offer less help when next intervening. If he fails, offer more help' (p. 185). Children whose mothers followed this pattern most closely performed best when asked to carry out the same problem on their own, and the authors note 'a clear distinction between quantity and quality' (p.186) in relation to the interventions children had received.

The close monitoring, adaptive support, and gradual handover of responsibility and control of the task is referred to as 'contingent teaching' by Wood and Wood (1996) and involves giving more specific instruction or support when a learner does not understand, and 'fading' - providing the child with the minimal help needed to ensure joint success' (p7). As they acknowledge, this is a highly complex and difficult process and it is unreasonable to expect tutors (even when adequately trained) to adhere to these rules all of the time.

In their original discussion, Wood, Bruner and Ross (1976) noted several scaffolding functions of the tutor:

- Recruitment (getting the child interested in the task);
- Reduction in degrees of freedom ('the "scaffolding" tutor fills in the rest and lets the learner perfect the component sub-routines that he can manage');

- Direction maintenance (supporting motivation, although, in time ‘the activity itself became the goal’, and encouraging risk taking);
- Marking critical features (drawing the learner’s attention to key points);
- Frustration control (although ‘the major risk is in creating too much dependency on the tutor’);
- Demonstration (modelling by completing an act or sequence which the child has begun but failed to successfully complete).

(summarised from p. 98)

Adults in schools have a need to ensure that pupils achieve certain academic goals by developing a set of skills and competences defined by a given curriculum. This involves ‘strategic scaffolding’ where strategies are deliberately taught which the adult knows the learner will need when completing a task (Hobsbaum, Peters and Sylva, 1996). This makes scaffolding in a formal schooling situation potentially very different to scaffolding in non-formal problem solving situations occurring in the everyday context of parent/child interaction. The type of task that the learner is engaged in is also relevant; scaffolding fixed tasks such as reading a text is potentially very different to a writing task which is ‘unpredictable in content, dynamic in nature and continually involves new, unplanned-for material’ (Hobsbaum, Peters and Sylva, 1996, p. 27). The functions suggested by Wood, Bruner and Ross (1976) have been grouped and developed in a number of ways in order to demonstrate the ways that they may be applied in educational settings. Tharp and Gallimore (1988) discuss the following as the key practices for assisting performance (scaffolding):

- Modelling (both motor acts and cognitive strategies);
- Contingency management (rewards and punishments – although they note that it cannot be used to originate new behaviours, this can keep the learner engaged in a task – it may be used therefore in recruitment, direction maintenance, and frustration control);
- Feedback (comparing the learner’s performance against a standard which can be set through modelling and instruction. This involves setting goals and sub-goals);

- Instructing (providing a directive for the next specific act in order to move through the ZPD);
- Questioning (these require a linguistic response and therefore ‘call up the use of language and in this way assist thinking... the sub processes become audible and then subject to other means of assisting performance’ (p.59));
- Cognitive structuring (‘the provision of a structure for thinking and acting’ (p. 63); these may be structures of explanation or structures for cognitive activity and help the learner to organise content and functions, making connections between what is known and what is new).

Modelling is a particularly important practice, as the learner must first recognise and understand what they need to produce before they can produce it (Wood, Bruner and Ross, 1976). The instructor should then: ‘engineer discrepancies for the child by constantly showing or requesting goals which he can currently recognise but not produce.’ Wood and Wood, 1975, p. 182). Instructing, questioning and cognitive structuring are linguistic ways of scaffolding which Bliss, Askew and Macrae (1996) argue become metacognitive over time.

The extent to which teachers understand and use the principles of scaffolding is unclear. A recent study by Pentimonti and Justice (2010) in relation specifically to ‘read aloud’ sessions in pre-school environments found that teachers when working with the whole class overwhelmingly used low level support strategies (generalising, reasoning, predicting) and rarely used high level strategies (co participating, reducing choices, eliciting). This demonstrates that whole class teaching is unlikely to narrow the gap in attainment by effectively supporting those requiring higher level support. Important to note however, is that the teachers reported that they frequently used high level strategies, demonstrating that a lack of understanding and/or awareness in relation to practice is likely to be a significant factor. In 1996, Bliss and Askew found that teachers saw almost all strategies used to support pupils as scaffolding. This suggests that a way forward would be to support teachers in understanding, developing and using a wider range of practices. Equally, it could be argued that taking pupils requiring higher level support to work in a group could allow the adult to focus more on their specific needs.

Teaching programmes have been developed which use the principles of scaffolding. In relation to one to one expert scaffolding in literacy, the most researched example is the RR programme, a set of procedures developed by Clay (1985). RR teachers must take part in a one year training programme, which supports them in understanding the theoretical basis of the programme and designing a RR programme for each individual pupil. The RR teachers use prescribed materials but select from these as appropriate for the perceived development needs of each pupil, rather than following a predetermined sequence. This involves learning how to carry out observations and analysis of the pupil's literacy practices, and analysing and evaluating their own interactions with the pupil in order to fine tune scaffolding practices. The daily thirty minute one to one sessions with pupils include reading of substantial amounts of text, and writing activities, with the focus being on supporting and developing skills rather than knowledge (Pinnell *et al*, 1994).

Analysis of observational data has been able to demonstrate the ways in which teachers ensure that the pupil begins to take action (and therefore begins to develop independent skills) from early on, by questioning and directing. Support is carefully calibrated after every action by the learner; this involves 'modulating' support, rather than decreasing support over the course of the session. This demonstrates that it is the moment-by-moment decisions which are the key to successful scaffolding; although there may be end goals for the session, it is the small goals and negotiating progress towards them which are of paramount importance (Rodgers, 2004). A comparative study of RR against other literacy intervention sessions (Pinnell *et al*, 1994) concluded that one to one tutoring is a key component of successful intervention for those pupils at most significant risk, because of the ability of the teacher to fine tune the interactions with the learner and the components of the programme. Hobsbaum, Peters and Sylva (1996) go further, claiming that:

'scaffolding can only take place in one-to-one teaching situations because contingent responding requires a detailed understanding of the learner's history, the immediate task and the teaching strategies needed to move on'

(p. 32).

However, Pinnell *et al* (1994) do suggest that group programmes using the same theoretical base as RR may be possible but ‘group instruction must be technically different from RR’ (p.34).

Clearly, talk is central to these scaffolding practices; although they might also include non linguistic actions and paralinguistic elements, it is the ‘responsive in-flight discussion’ (Tharp and Gallimore, 1988, p. 58) which is paramount because of the established link between thought and language. If scaffolding is taking place in TA led literacy intervention sessions then this would be seen by analysing the turn by turn interactions of the participants. The focus is less on *whether* assistance occurs, but *what* assistance is given and *how* this assistance is taken up:

‘...a learner’s actual achievement is never just a reflection of the effectiveness of that individual’s inherent ability, but also a measure of the effectiveness of the communication between a teacher and learner’

(Mercer, 1995, p. 72).

A further point to note is the difference between achievement in the task and the actual learning which has taken place; whilst the completion of the task may be noted ‘the nature of what gets learned or internalised during the course of interaction still remains unclear and controversial’ (Wood and Wood, 1996, p. 6). Therefore, it is possible to consider the implications of using different practices for the learning experience of the individual and the group but not to comment on the actual learning which has taken place.

2.3.7 Reciprocal scaffolding

Reciprocal scaffolding suggests that pupils might be grouped in a classroom context to provide expert scaffolding for each other, rather than an adult being needed to provide this. However, for this to be successful pupils need to understand the concept of collaborative group work, and understand the interactional mechanisms which lead to successful collaboration; they need to understand and be able to scaffold each other. One of the earliest studies exploring the features of collaborative group talk was carried out by Barnes and Todd (1977). They concluded that the pupils behaved very differently when working away from a teacher as a collaborative group, consulting materials, testing interpretations and treating each other as a resource. There are some

features of the study which warrant consideration in terms of relating it to modern primary school contexts. Firstly, the study was carried out with secondary age pupils, which Barnes considered to be out of the 'concrete operation' stage described by Piaget (age 7-11, appropriate use of logic to solve problems that relate to actual objects and events, not abstract concepts). Those excluded from the study were described as 'dull pupils' (p.4). The grounds given for this were that they would produce little talk, and would not be able to read the instructions on the card.

One of the factors considered was friendship groupings; the first groups worked in friendship groups, whereas the second worked in random groupings. It was found that the pupils working in friendship groups were more successful, although it is acknowledged that this finding may be questionable as the second groups did not have as much preparation time (for example, time with the researchers to discuss the project and become accustomed to the audio recording equipment), or as much time to complete the task. Howe and Mercer (2010) argue that there is a complex and poorly understood relationship between the relational factors (for example, friendships) and status factors (for example, popularity) which help to form pupils' social histories. This is a particularly complex issue as the quality of talk is both affected by these factors, and potentially changes them. This may be a consideration when forming groups for literacy support, as pupils are often taken from across a year group, which may consist of two or more classes and individuals with varying social histories. Groups who are unwilling to challenge each other, or who are socially argumentative, are less successful than those who show this ability to challenge each other in a positive way: 'the expression of a dissident opinion... plays a crucial part in understanding' (Barnes and Todd, 1977, p. 36). This feature forms the basis of what Barnes and Todd (1977) describe as 'exploratory talk' (as opposed to 'presentational talk'), which is characterised by its fluidity and tentative nature.

Neo-Vygotskian theorists such as Neil Mercer (Edwards and Mercer, 1989; Mercer, 1995; Mercer, 2000; Rojas-Drummond and Mercer, 2003) have developed these ideas. Although making clear that talk cannot be categorised in a definitive sense, Mercer describes three types of talk:

- Cumulative: ‘speakers build positively but uncritically on what the other has said’;
- Disputational: ‘characterised by disagreement and individualised decision making’;
- Exploratory: ‘partners engage critically but constructively with each other’s ideas’.

(Mercer, 1995, p. 104)

Again, Mercer suggests that exploratory talk is likely to move pupils’ learning forward. He argues that the skills of exploratory talk can, and should, be taught. Pupils in both key stages 1 and 2 have been shown to be responsive to this and to make cognitive gains as a result (Baines, Blatchford and Chowne, 2007; Blatchford *et al*, 2003; Wegerif *et al*, 2004). However, as discussed by Lyle (1996) and Blatchford *et al* (2003), organising group work within the whole class situation is challenging, requiring careful planning in terms of the groupings (seating arrangements, group size, composition and stability), task (to ensure that it requires pupils to work together in a real sense), and the establishment of group work skills. Pupils need to receive expert scaffolding in relation to these skills; this scaffolding would initially need to be provided by an adult working with groups and would need therefore to be planned alongside the subject content of adult led group work. A teaching programme which has been shown to achieve this is Reciprocal Teaching (RT) (Palincsar and Brown, 1984; Palincsar, Ransom and Derber, 1988). RT uses dialogue as the means to develop the skills of poor comprehenders in approaching a text in the way that successful comprehenders do, using the four strategies of generating questions; summarising; clarifying and predicting. Expert scaffolding is initially provided by the adult, by modelling the strategies. Students then take turns to lead the dialogue, practising the skills which have been modelled and supported when needed by the adult. Eventually the adult withdraws, leaving the group able to run their own reading sessions. The adult therefore supports individuals and the group in developing the skills of reciprocal scaffolding, alongside the specific comprehension skills being practised.

2.3.8 Self-scaffolding

Self-scaffolding is argued by Holton and Clarke (2006) to be the same as metacognition. Metacognition was first defined by Flavell (1976) as: ‘one’s knowledge concerning one’s own cognitive processes and products or anything related to them’ and involves ‘the active monitoring and consequent regulation and orchestration of these processes’ (p. 232). It is this self-scaffolding which allows pupils to work through a challenging task independently: identifying and analysing problems, using relevant self-assistance strategies, and evaluating outcomes. In the context of teaching and learning, it is having a range of independent answers to the question ‘What do I do now?’, and the ability to ask this question of oneself. As well as allowing greater autonomy, Goswami and Bryant (2010) argue that:

‘Children with good metacognitive skills can improve their own learning and memory, for example, by adopting effective cognitive strategies and by being aware of when they don’t understand something and seeking more guidance.’

(p. 156).

Metacognitive awareness is developed through social interaction and therefore children will come into the schooling system with varying knowledge and skills in this area. A study by Neitzel and Dopkins Stright (2003) showed that the metacognitive content of a mother’s interactions with their child was a predictor of the child’s task persistence when they reached the stage of formal schooling. Children whose parents had discussed how to approach problems, talked through the problem solving process, and evaluated activities: ‘checked their work, recognized when they had made an error, self-corrected, and adjusted strategy use appropriately in school’ (p. 155). This suggests that schools need to consider not only pupils’ cognitive and physical development when planning activities, but also ways of supporting metacognitive development, bearing in mind that pupils will have different starting points in this area too. Provision then needs to ensure that metacognitive development continues, and this needs to be built into learning opportunities and scaffolded interactions: ‘the development of self-scaffolding skills, the scaffolding of self-scaffolding skills, should be a primary goal of education’ (Bickhard, 2005).

This adds an extra dimension to the process of scaffolding during a task; Holton and Clarke (2006) therefore define scaffolding as: ‘an act of teaching that i) supports the immediate construction of knowledge and ii) provides the basis for the future independent learning of the individual’ (p. 131). This requires the provision of both conceptual and heuristic scaffolding, with the heuristic scaffolding focused on developing the metacognitive awareness of an individual in order to support future self-scaffolding. They suggest that the introduction and modelling of, and practice in the use of self-scaffolding questions can strongly support the development of metacognition. Meyer and Turner (2002) also identify questioning as a key aspect of building student autonomy, both questions designed to prompt thinking about the problem, and questions designed to encourage the articulation of approaches used and evaluation of these approaches. Rose (2009) suggests that this might be particularly important for students who are falling behind in their learning and may have begun to generalise negatively from their experiences. He provides a list of questions which students might be supported in asking of themselves in relation to their learning, although they are very broad such as ‘Do I know which strategies I can use to help me achieve this?’ (p.125). Bickhard (2005) refers to ‘functional scaffolding’ which ‘enables models of ongoing self-scaffolding of the sort that we engage in all the time with external notes, supports, reminders, intellectual and physical prostheses’ (p. 171). The aim of the adult is therefore to ‘expert scaffold’ the learner in developing self-scaffolding skills which allow them to carry out other tasks independently (regardless of the conceptual content):

‘drawing attention to strategies provides a model of behaviour regulation for the learner, which may become internalised, a ‘voice in the head’ so that the child may remind herself’

(Hobsbaum, Peters and Sylva, 1996, p. 22)

This relates to the fading (Wood and Wood, 1996) and hand over (Bruner, 1983) principles, with the aim to move the learner to a more general level of independence in tackling and solving problems independently. It is vital that the adult does not control the detecting and repairing of errors as this is likely to lead the learner to become over dependent on adult support or develop a view of learning as ‘acquisition of procedures’ (Wood, 1988, p. 294).

2.4 Classroom interaction

Conversation Analysis (CA) is based on the same fundamental concepts as the social constructionist theory of learning and therefore offers an ideal framework for analysing how learning is achieved through social interaction. The empirical data collected for this study will use the CA frameworks established in relation to turn taking, repair and topic in mundane (social) conversation to consider ways in which the organisation of turns and practices in relation to repair and topic are modified for the type of institutional talk being studied:

‘More institutional forms of talk-in-interaction involve either the reduction or the systematic specialization of the range of practices available in mundane conversation’.

(Hutchby and Wooffitt, 1998, p. 148).

It will also consider the modifications which have been shown to be generally in use in teacher led classroom and group situations and (where available) in TA/pupil interactions.

There is a large body of empirical research into whole class talk-in-interaction as a specialised, institutionalised form which has concluded that there are some features which remain constant, independent of the individual style of the teacher. These will be discussed, focusing on a specific identified pattern of interaction, the IRE/F. The third turn will then be explored specifically in relation to the repair of troubles which occur, and the ways in which the initiation and follow up moves can operate in relation to topic will be explored. NLS materials and empirical studies into talk-in-interaction during NLS sessions will also be considered, as the intervention sessions being researched form part of the NLS ‘package’.

2.4.1 The organisation of turns

One of the fundamental features of conversation established by CA studies is turn-taking. Sacks, Schegloff, and Jefferson (1978) describe two components of this feature: the Turn Construction Component and the Turn Allocation Component. The Turn Construction Component involves the concept of the Turn Construction Unit (TCU). The TCU may be of any linguistic (or para-linguistic) type and any length. It is a ‘turn’ in that it constitutes an action within the conversation; once started the speaker is

initially entitled to complete the TCU. The Turn Construction Component also involves the concept of the Transition Relevance Place (TRP). This is where the conversation moves from one TCU to the next, and is therefore where the Turn Allocation Component operates. The end of the TCU (and therefore the TRP) can be predicted by the participants in the interaction who may then bid for the next turn. Three techniques for turn allocation in mundane conversation have been established:

- 1) Current speaker selects next.
- 2) Self selection.
- 3) Previous speaker may continue into another turn.

(Beattie, 1983)

Turn taking builds in an intrinsic motivation for listening, in that a participant bidding for a self selected turn needs to bid for the turn as close as possible to the TRP, as this is most likely to lead to the self selection being accepted. This is because of the general rule "first starter gets the turn." (Sacks, Schegloff and Jefferson, 1978, p. 31). If the participant bids before this point the bid may be treated as an interruption. This illustrates the fact that 'the "turn" as a unit is interactionally determined' (*ibid* p. 42), in that it requires both the speaker of the current turn and the speaker of the next turn to be involved. The first and third practices described by Beattie (1983) also require both the current speaker and the next speaker to be interactionally oriented to these turn taking moves.

Clearly, the organisational features of many classroom interactions are likely to vary significantly from those of mundane (social) conversation, according to the number of participants and style of teaching. Long before nursery age children demonstrate understanding of turn-taking in mundane conversation (Snow, 1977). However, they then need to orient to the specific, institutional, features of talk-in-interaction in the classroom, as whole class formal teaching becomes increasingly prevalent as they progress through their school career. As Alexander (2003) puts it, they need to learn a set of 'coping strategies which anywhere outside a school would seem bizarre' (p. 36). An obvious example of this would be:

‘In contrast to everyday conversation, pupils must normally bid for a turn, usually by raising their hand and waiting to be nominated by the teacher’

(Skidmore, Perez-Parent and Arnfield, 2003, p. 51).

McHoul (1978) established that the organisational rules of turn taking in natural conversation were modified in specific ways during ‘formal talk’ in the classroom, with turn taking rights being to a large extent pre-allocated based on the participant’s role as ‘teacher’ or ‘student’. Swann and Graddol (1988) also found that classroom discourse is essentially asymmetrical. Teachers always dominate talk, as they hold the role of chair and as such are expected to take a disproportionately high number of turns. In other words they control the ‘turn exchange mechanism’, the way in which speakers are selected and incorporated into talk. They are free to: select the next speaker; self select; or continue into the next turn (Beattie, 1983). An individual pupil, more likely to be in the position of ‘responding’ than initiating (see, for example, Skidmore, Perez-Parent and Arnfield (2003)) is highly unlikely to select the next speaker, as the teacher: ‘always has the right to provide the third move’ (Nassaji and Wells, 2000, p. 377). They are also highly unlikely to self select or continue into the next turn, and it would be expected that a teacher faced with a self selecting pupil, or one continuing into a next turn, is likely to view this as an interruption, as it causes the speaker (the teacher) to lose the floor before they intend to relinquish it (Beattie, 1983). The teacher is therefore likely to initiate a repair mechanism:

‘even when students initiate a sequence, the teacher very often provides a response that, in function, is similar to the third, follow-up move of the three-move exchange’

(Nassaji and Wells, 2000, p. 378).

This allows the teacher to re-establish control by continuing into the next turn and providing a new initiation.

2.4.2 The Initiation-Response-Evaluation/Feedback structure

More specifically, there is a exchange structure characteristic of this type of talk-in-interaction: the IRF (Initiation-Response-Feedback) (Sinclair and Coulthard, 1975) or IRE (Initiation-Response-Evaluation) (Cazden, 2001), also known as the ‘recitation script’ (Tharp and Gallimore, 1988) or ‘triadic dialogue’ (Lemke, 1990). The ‘initiation’ is generally a question, most often closed and asked by the teacher. The

‘response’ is the pupil’s best guess at the answer that the teacher wants. The third move is almost always given by the teacher: ‘evaluating the student’s contribution for its conformity to what he or she considers to be a correct or acceptable response’ (Nassaji and Wells, 2000, p. 377).

Larsen-Freeman and Cameron (2008, p. 235) suggest that classroom talk:

‘shows variability around a very stable form...The discourse system will tend to return to the IRF attractor because it is a pattern that works’

Reasons for the IRE/F pattern being prevalent may include the need to control interactions, as there are such a large number of participants in a whole class teaching situation (Nassaji and Wells, 2000; Radford, Ireson and Mahon, 2006). Drew and Heritage (1992, p. 27) suggest that in classrooms: ‘the turn-taking system is designed, at least in part, to control or curtail the nature of audience participation in any ongoing exchange’. Crucial to this is the fact that classroom conversations in mainstream schools can involve 30 or more participants and therefore:

‘it is necessary for somebody to ensure that all the discussion proceeds in an orderly manner and that, as far as possible, all participants contribute to, and benefit from, the co-construction of knowledge that is the purpose of the discourse’

(Nassaji and Wells, 2000, p. 378).

It should be noted however that all participants (teacher and pupils) need to orient to these turn allocation techniques in operation in order for interactional understanding not to break down. Interestingly however, the ‘ground rules’ which govern classroom interactions are not generally openly discussed with pupils, or indeed with other adults in the classroom. Mercer (1995) suggests three possible reasons for this which are that teachers assume the ground rules are self-evident; they willingly restrict access to knowledge; and/or they believe that nothing will be gained from making the ground rules explicit.

The number of participants involved provides a rationale for a teacher led whole class turn taking system; however, when teachers are working with smaller groups (4-6 pupils) one might expect the Turn Allocation Component to operate in a way which is closer to mundane conversation (with, for example, greater use of the self selection

technique by pupils). However, Skidmore, Perez-Parent and Arnfield (2003) found that the turn taking features found in whole class situations were also the norm in small group teacher led guided reading sessions. This would suggest that the participants did not regard the activities undertaken in small groups as interactionally (and therefore pedagogically) different to those undertaken in whole class situations. Also of interest is the finding by Mroz, Smith and Hardman (2000) that all 10 of the teachers they studied used the same discourse style, irrespective of the age of the pupils they were working with or the size of the group. Although it might be assumed that talk-in-interaction in a small group instructional context might not need the same level of control by the teacher, this evidence, although solely in the context of literacy hour group work, indicates that the teacher led IRE/F features remain. Skidmore, Perez-Parent and Arnfield (2003) point out that the control of talk by the teacher allows all pupils to contribute, but this still follows the IRE/F format, and does not allow pupil to pupil talk. It is important to investigate TAs' interactions with pupils during intervention sessions for ways in which talk is organised, as it cannot be presumed that it follows the dominant pattern found in either whole class or teacher led group talk.

This may suggest that pupils are not capable of participating in these interactions in any other way than following the IRE/F form, as they have been disempowered and are being manipulated by the more powerful adult into participating in the type of interactions which maintain the power position of the teacher. However, just as teachers have choices in terms of interactions:

‘teachers have the role-given right to speak at any time and to any person.
But not all teachers assume such rights and few live by such rules all the
time’

(Cazden, 2001, p. 82)

It needs to be acknowledged that pupils also have choices. In order for this type of talk to be ‘successful’, in the sense of the features being consistent and maintained, all participants need to be making a positive effort to orient to the expected features. This fact has been most pointedly shown by Sola and Bennett (1994), whose study of three classrooms concluded that there is often a struggle between the discourse expected by the class teacher, and the discourse of the students themselves as members of the local community. This struggle may take the form of overt rejection of the expected

discourse, or the subverting of it. This research reflects the work of Bakhtin (1984), who suggests a model of language in which every utterance carries social weight, forcing the speaker to take up an ideological position in the struggle between what he terms centripetal and centrifugal. In this case, the centripetal being the official discourse of education and the centrifugal the discourse of the local community. Of course, it is often impossible to view the local community discourse as a homogenous one and it may be that some groups orient to the expected features more readily than others. This has been shown in terms of ethnic background (Sola and Bennett, 1994) and gender (Swann and Graddol, 1988). The evidence that the expected features are sometimes subverted by groups or individuals therefore proves that, despite the 'ground rules' not being made explicit, a) all participants have to work to sustain the IRE/F pattern and b) participants choose to sustain this pattern. Teacher directed whole class interaction, with its established features, is the genre given authority by both teachers and pupils. In addition, it has been argued that a number of interactional 'floors' can exist during any classroom activity (Jones and Thornborrow, 2004), which can exist simultaneously, or be switched between, and each of which needs the participation of all parties in order to operate. For example, one floor may relate to the teacher taking the class register, whilst another relates to pupils whispering news to each other during this activity. There is also evidence that patterns of interaction build up between participants as a way of getting a specific type of learning task completed. Pike (2005) demonstrated that the IRE/F sequence became adapted to a five part sequential structure over a number of sessions as a tutor and child worked together, with the turns becoming abbreviated over time as actions become presupposed by the participants.

Of course the fact that pupils spend the majority of their time listening to a teacher, rather than being active in the discussion, does not mean that they are necessarily passive. Constructivists assume that whilst listening pupils will be assessing the new information being given against their existing knowledge, and therefore creating new knowledge (Cazden, 2001). It is also important to note that the IRE/F structure will be useful in some contexts and for teaching some types of skills and concepts; no type of classroom interaction is in itself good or bad, it is simply more or less suitable for the learning task in hand (Alexander, 2001). In addition, it is important to consider the point that the IRE/F structure is in itself more flexible than has so far been discussed.

Rather than the ‘finding the right answer’ idea, which would lead to a strictly repetitive IRE/F structure, the teacher is able to adapt aspects of the model to make the dialogue more equal. There are two key ways that this can be done: changing the nature of the question, and changing the nature of the third (feedback) move (Nassaji and Wells, 2000). Questions can be authentic (in that they ask for information which the teacher does not have), rather than closed questions which are simply seeking known answers. The third move, rather than simply giving praise or attempting to ‘repair’ (or encouraging the pupil to self repair) an incorrect answer (Macbeth, 2004), can lead to further follow up questions which may ask for explanation or expansion or build in some other way on the pupil’s answer, and carry the dialogue forward. In this way the feedback move can be seen as a response to the response, but also as a new initiation. This leads to a more equal dialogue, a model which is increasingly being seen a crucial tool in ensuring the most successful learning possible. Radford, Ireson and Mahon (2006) consider these sequences of triadic dialogue as ‘zones of negotiation’ which operate when the interaction is operating beyond the learner’s current developmental level and the adult is responding to the learner’s agenda. This is the key to providing scaffolding, and close analysis of the turn by turn interactions between TAs and pupils will explore the ways in which this happens.

2.4.3 Repair

Repair is the means by which participants deal with trouble sources in order to maintain a ‘socially shared cognition’ (Sacks, Schegloff and Jefferson, 1978). It is defined as the ‘practices for dealing with problems or troubles in speaking, hearing, and understanding the talk in conversation’ (Schegloff, 2000, p. 207). Again, the established CA framework for the repair of troubles during mundane conversations can provide a helpful starting point for considering repair techniques in the institutional context of the classroom. Jordan and Henderson (1995) point out that repairs in mundane conversation are often done without participants being aware that they are doing them. It is through the analysis of the data that the mechanisms for achieving repair can be seen. There are four main varieties of repair (Hutchby and Wooffitt, 1998):

1. Self-Initiated Self Repair (SISR).
2. Other-Initiated Self Repair (OISR).

3. Self-Initiated Other Repair (SIOR).
4. Other-Initiated Other Repair (OIOR).

The four types of repair appear above in preference order in relation to mundane conversation; there is a strong preference in mundane conversation for self-repair (Hutchby and Wooffitt, 1998). Correction (OIOR) is the least preferred technique for repair in mundane conversation, and can occur in both embedded and exposed forms. Embedded corrections move the interaction on without the need to suspend it to repair the trouble; although a correction can become the focus of the conversation (i.e. become an exposed repair) if it is heard as interactionally significant by the one of the other participants (i.e. if there remains a lack of shared understanding significant enough to prevent the continuation of the interaction). Exposed corrections suspend the ongoing interaction in order to deal with the trouble; however, these can be taken up as embedded corrections (by the speaker being corrected taking up the correction in a subsequent turn of the original interaction) (Jefferson, 1987). It should be noted that in relation to repair (as in all other practices) non-verbal aspects can be equally as significant in achieving actions. For example, the alignment of gaze, systematically achieved by participants, has been shown to be significant in self initiated other repair (Goodwin and Goodwin, 1986).

When looking at talk-in-interaction which is in an instructional context, it has been shown that the adult participant is actively looking for troubles and is conscious of the need to repair them (Macbeth, 2004; McHoul, 1990; Radford, Ireson and Mahon, 2006). Therefore, although each of the repair varieties listed above are possible in instructional contexts, the least preferred varieties in mundane conversations are used more often in these contexts (McHoul, 1990); repairs initiated by the adult can either prompt self correction on the part of the pupil (OISR) or provide a correction (OIOR). It has been shown that corrections are routinely held from pupils by teachers, who use various repair initiator (RI) devices (such as cluing and question reformulation) to support self correction (Macbeth, 2004; Radford, Blatchford and Webster, 2011). RIs have also been shown to be in use in classrooms of pupils with specific speech and language difficulties (SSLD) (Radford, 2010b). RIs can be classified as general (targeting the whole of the prior turn) or specific (pinpointing the nature of the trouble source) (Schegloff, Jefferson and Sacks, 1977). General RIs (such as ‘what?’) do not provide

any information about the nature of the repairable; the trouble may be one of hearing or of meaning. Two specific RIs found in classroom interactions are checking requests (formulated as ‘what’s X?’) and the Designedly Incomplete Utterance (DIU) (Koshik, 2002; Radford, 2010b). Found in both second language and SSLD classrooms, DIUs repeat all or some of the pupil’s prior turn, finishing at a point where the pupil can complete the turn; they therefore support the learner by pinpointing exactly what needs to be repaired but encourage independent self repair as they require them to draw on their own resources to make the correction. Candidate offers (providing an alternative lexical or grammatical item) are the third category of RIs; these provide models in order to guide, direct or assist the recipient to respond in a particular way (Pomerantz, 1988).

The feedback move can therefore be used in various different ways as the adult scaffolds the pupil’s learning; each feedback move potentially affects both the immediate learning environment of the pupil, and their longer term development of strategies for repair. Ideally the pupil would be encouraged to move from reliance on high level RIs or correction by an adult, and become more independent (able to respond to lower level RIs). It does appear to be important however that errors are challenged and overt RIs are provided, as it has been shown that misunderstandings can remain unresolved over significant periods of time, with interactional difficulties being resolved inadvertently (Pike, 2005). The task may be completed but without problems of understanding on the part of the child being addressed. There may be situations when exposed corrections offer opportunities for teaching points to be made explicit to the individual or group. This therefore involves pedagogical decisions regarding what troubles to repair and how. In relation to TAs working with groups of pupils during whole class mathematics lessons, it has been shown that they readily use correction or high level prompts. This is likely to lead to over dependence on adult support (Radford, Blatchford and Webster, 2011). Turn by turn analysis of the interactions between TAs and pupils during literacy intervention sessions can provide information about what repair strategies are in use and the impact of these on the learning experiences of both individuals and groups.

2.4.4 Topic

In CA studies, topic relates to practices for initiating, pursuing and curtailing topic rather than what is being talked about. It is argued that topic is co-constructed by participants. Topic initiation can be proffered (proposed) or solicited (invited) by participants (Schegloff, 2007) and these actions responded to by acceptance or rejection. Topical pursuit is achieved and topic shifts and curtailment are offered and accepted through the active orientation of participants (Button and Casey, 1985).

It has been shown that practices in relation to topic have been adapted within the institutional context of the classroom, in line with the IRE/F structure. Questions in mundane conversation can be used to nominate topic; these questions are ‘genuine’ in that is the recipient who is considered to have the greater knowledge in relation to the topic. In this way questions are used for information gathering. Within the classroom however, the IRE/F structure means that questions hold a unique position. Used much more frequently to initiate topic than other practices, they are to stimulate thought and encourage participation (Edwards and Mercer 1989). They rarely deviate from a set pattern of teacher ‘question with a known answer’ (Macbeth, 2004, p. 703); the question is not therefore genuine in that it is seeking information already known to the participant asking the question. Questions are also more likely to be closed (there is only one answer accepted by the teacher) than open – something which has been shown to have remained constant across decades (Galton *et al*, 1999). This therefore becomes a type of oral comprehension exercise, focused on the skills of locating the ‘correct answers’ from the information put forward by the teacher, or given in a proceeding session. Pupils can be taught to extract information from written texts in order to answer basic comprehension exercises without understanding what they are reading, by relying on tactics such as finding the sentence with the same key words as the question, and using grammatical knowledge. In the same way pupils learn to gauge and give the answers that the teacher expects, using a range of strategies: ‘all the time trying to discern in the teacher’s clues, cues, questions and presuppositions what that required solution actually is’ (Edwards and Mercer, 1989, p. 116). A specific example is that pupils need to know that ‘repeated questions imply wrong answers’ (*ibid* p. 45). A further difficulty with the IRE/F structure is that it does not give time for pupils to

reflect on the topic being discussed as the Feedback move does not necessarily extend or develop the topic (Mroz, Smith and Hardman, 2000).

Through the IRE/F structure teachers therefore hold the authority in whole class interactions (in that they generally initiate topic and it is initiator oriented), and this structure is actively oriented to by both teachers and students (Mroz, Smith and Hardman, 2000). It has also been found in small group guided reading sessions that the teacher rarely asks authentic questions, tightly controls topic and talks much more than the pupils (Skidmore, Perez-Parent and Arnfield, 2003). A study of pupils working in small groups with an adult present (Haworth, 1999) concludes that pupils also tend to orient to the whole class interaction features and actively seek adult input to lead this. The difficulty with this study however is that the two groups involved were split in terms of gender, with Haworth concluding that the girls were more likely to 'establish themselves as pupils rather than individuals...casting themselves as teacher-dependent learners consistently orientated to the teachers agenda' (p.106), whereas the boys were more likely to give personal perspectives using phrases such as 'I think..' and were less reliant on the adult to construct knowledge and understanding for them.

In addition to the research that has established the IRE/F format as the most common format in schools, there is a growing body of opinion that this does not provide such a quality learning experience as a balanced two way dialogue between teacher and pupils (dialogic talk as previously discussed). In line with this, there is evidence that the feedback move is used to open up the topic by language support teachers (Ridley, Radford and Mahon, 2002) and some mainstream teachers (Radford, Blatchford and Webster, 2011) and that in a preschool 'read alouds' (whole class book sharing) context teachers were shown to use scaffolding devices which require pupils to draw more on their own resources such as generalising, reasoning and predicting (Pentimonti and Justice, 2010). Pentimonti and Justice caution however that some pupils may need high level support strategies (co-participating, reducing choices, eliciting) and if these are not provided for may not be being receiving a quality learning experience within the whole class activity. Findings by Burns and Myhill (2004) have shown that low achieving pupils are more likely to be off task and not participating in whole class teaching sessions. They are also more likely to draw on their out of school experiences than make links with previous curriculum learning (Myhill, 2001), placing them at a

disadvantage in whole class teaching situations which are focused on curriculum content.

Specific practices have been identified which can support more equal co-construction of topic. The use of topic ‘invitations’ (designed to generate novel topical candidates) and topic ‘elicitors’ (such as ‘tell me about..’) have been shown to increase pupil engagement and participation (Radford, Ireson and Mahon, 2006); although the precise construction of these can significantly vary in relation to providing opportunities for greater pupil authority over topical pursuit or closure (Radford, 2010c). Feedback moves can ‘do the business of accepting, incorporating, reformulating and extending pupils’ responses’ (Radford, Ireson and Mahon, 2006); in this way utterances are chained together in ways which are more dialogic.

2.4.5 Teaching assistant and pupil interactions

When one considers the changing role of the TA, it would seem likely that the type of talk between TAs and pupils will have changed. Whereas TAs would often oversee groups of pupils undertaking less ‘academic’ activities, for example art and technology, their role is now a more direct pedagogical one (Blatchford *et al*, 2009b; Blatchford *et al*, 2009d). Therefore it might be expected that the type of talk may have shifted from a higher proportion of social conversation, to more instructional talk. However, as there has been a lack of research into these interactions, this would be impossible to now prove. All that can be done is to consider the current situation.

As the role of the TA is different to that of a class teacher (perhaps less formal, or perhaps, as suggested by Hancock and Eyres (2004) peripheral), the talk between them and the pupils they work with may be expected to be different in type from, and have features which vary from, that of teacher/class discourse. Some research has shown that there is a tendency for TAs to copy the ‘performance’ aspects of teaching, modelling themselves on the teachers that they work with (Moyles and Suschitzky, 1997). Talk between TAs and teaching groups working *within the classroom* during maths sessions has recently been studied. Coding of TA utterances when working with groups, when compared to teacher utterances when working with the whole class during the same session was first used, together with some qualitative analysis of the utterances (Rubie-Davies *et al*, 2010). This analysis showed that there were some similarities in the talk;

both used questions and prompts for engagement/motivation more often than any other type of utterance for example. However, two significant differences were found. TAs focused on task completion whereas teachers focused on learning, and TAs were reactive whereas teachers were proactive. Specifically in terms of language features:

- When using prompts, TAs gave answers whereas teachers prompted self checking and deeper thinking;
- Feedback from TAs focused on task completion, whereas teachers encouraged further learning;
- TAs gave confusing or incorrect explanations (or gave none) whereas teachers gave clearer explanations and spent more time on this;
- TA talk was around procedural issues and ‘non task’ topics whereas TAs made links to prior learning;
- TAs had a very informal and chatty style whereas teachers used a more formal style.

Further fine grained analysis of the data has shown the IRE/F pattern to be in use, although it differs significantly from that between teachers and pupils in the same sessions in that the feedback move often supplies the answer or provides very high level prompting (Radford, Blatchford and Webster, 2011).

Work carried out by Gardner (2006; 2005) suggests that access to relevant training is significant in relation to these differences. Interactions between mothers and children with speech disorders, and speech and language therapists (SLT) and the same children were shown to differ significantly (Gardner, 2005). Whereas a trained SLT focused specifically on the target phone, the mother was more likely to correct the speech more generally (targeting multiple phones). The SLT also moved on once a reasonable level of success had been reached in the target phone and built practice across a series of tasks, whereas the mother continued to ask the child to repeat the word (sometimes leading to a worse approximation of the target phone), demonstrating that errors can be interactionally generated by the adult. SLTs also gave more positive praise, incorporating focused evaluations of the child’s prior try. This demonstrates the significant difference between the quality of learning interactions between trained and untrained adults when working with children with SEN, which might similarly be

expected to apply to untrained adults in the classroom (TAs). In a further study (Gardner, 2006) it was demonstrated that untrained adults working in an educational context (LSAs) showed similar patterns of interactions with these children as the mothers, generally using a three part IRE/F sequence. The 'Talking about Speech' training programme introduced demonstrated that LSAs could be supported to successfully adopt many of the techniques used by SLTs, using the notion of flexibly moving up and down a 'ladder of support' (p. 33) in order to encourage the development of independence by the child.

A question can also be raised as to whether interactions between TAs and children differ in relation to in class work (which is set and monitored by the teacher) and literacy intervention sessions (which are taught out outside of the classroom, independently by the TA). Work by Stribling and Rae (2010) on the interactions between adults and learning disabled ASD children has demonstrated that LSAs and teachers carry out different but complementary scaffolding roles when working together with a child, operating as a team. Both orient to both the student's actions and the actions of the other adult, working reflexively in relation to these. It was shown that the focus of the LSA was on support in the child's response phase and used modes other than speech (in this case physical objects and support), whereas the teacher gave prospective and retrospective support primarily through the mode of talk. Although there may not be such a high level of joint involvement in interactions with individual children of both the TA and the teacher, the fact that there are two adults involved in the interactions across the introduction, completion and evaluation of tasks may affect the types of interactions undertaken. It cannot be assumed therefore that interactions in intervention sessions taught solely by TAs share the interactive features of those found when TAs take what might be considered as more of a 'support' role within the classroom.

The discourse between a TA working with a group of pupils outside the classroom during intervention sessions may have features which are either similar, or significantly different to those found between participants in mundane conversation in non-institutional settings, and can be compared to both these structures and the IRE/F structures used within whole class teacher led sessions.

2.4.6 National Literacy Strategy and related government guidance

The NLS (DfEE, 1998) suggested that whole class interactive teaching should be placed at the fore, and that 'literacy instruction' was ... 'not a recipe for returning to some crude or simple form of 'transmission teaching' (DfEE, 1998, p. 8), while not indicating what style of teaching was considered to be prevalent at the time, or defining what was meant by transmission teaching. The focus instead was on classroom organisation and management issues, in particular the move from small group/individual work to whole class teaching (p. 10). The suggestion appeared to be that the more time a pupil spends being taught directly by a teacher, the better the quality of the learning – potentially a 'quantity over quality' model. It had already been found that the introduction of the National Curriculum (NC) as part of the 1988 Education Reform Act (Great Britain., 1988) had increased the amount of whole class teaching, although the focus was on giving factual information and asking closed questions, and it was argued that a further focus on discrete subjects through the introduction of the NLS and NNS would increase this tendency (Galton *et al*, 1999). Later evidence did indeed show that the introduction of the NLS had increased the amount of direct instructional talk, but had not changed the structure of classroom talk (Burns and Myhill, 2004; Mroz, Smith and Hardman, 2000; Smith *et al*, 2004). The analysis of data collected by Smith *et al* (2004) during NLS sessions showed that pupils responded to questioning, rather than initiating it, gave short contributions (3 words or less for 80% of the time in KS1 and 70% of the time in KS2), and their contributions accounted for less than one quarter of the talk time. They conclude that there are two significant reasons for this. Firstly, teachers thought that their teaching gave more opportunity for pupils to contribute than is actually the case (a view supported by Burns and Myhill (2004) and Mercer (1995)). Here, a crucial divide needs to be drawn between quantity and quality with regard to pupils' contributions. Although pupils may be (as a group) making a large number of contributions, this does not mean (as exemplified by the studies above) that pupils' contributions are quality ones, in terms of length of contribution. Lengthier contributions would indicate features such as explanation or justification which are likely to lead to a deeper understanding of the concept in hand.

Secondly, it was argued that teachers have: 'no clear concept of what interactive whole class teaching is, or shared language to discuss it' (Smith *et al*, 2004, p. 409), partly

because this was never satisfactorily defined by Reynolds and Farrell (1996) in their review of international comparative studies which introduced the term, which was then taken up in NLS materials. It was also argued that the concept had been taken out of the cultural context of the Confucian heritage cultures (countries such as Japan and Singapore) in which reciprocal teaching is well established alongside direct instruction (Galton *et al*, 1999) and pupils are socialised to learning in large groups in ways that are often misunderstood by Westerners (for example, repetitive learning is often mistaken for rote learning) (Biggs, 1998). As a result:

‘Many teachers saw the NLS view of interactive teaching as being largely restricted to surface features, such as ‘gimmicks’ using fans etc, at the expense of deeper unobservable features such as the encouragement of reflection, self-esteem and higher order thinking’

(Merry, 2004, p. 23).

One possible reason for this is that the research base of the NLS is school effectiveness literature, which tends to focus on a top down, mechanistic approach to implementing new initiatives. This:

‘has the potential to lead to pedagogies which focus narrowly upon skill development, reduce professional input and autonomy through an emphasis upon external curricula and expertise, and emphasise quantifiable assessment and ‘norms’

(Soler and Paige-Smith, 2005, p. 46).

Indeed, Burns and Myhill (2004) have argued that the term ‘interactive’ has become meaningless due to the lack of clarity and links with a high accountability culture, and recent findings by Ofsted (2012) have concluded that:

‘The quality of pupils’ learning was hampered in weaker lessons by a number of myths about what makes a good lesson... an excessive pace; an overloading of activities; inflexible planning; and limited time for pupils to work independently. Learning was also constrained in schools where teachers concentrated too much or too early on a narrow range of test or examination skills.’

(pp. 5-6)

Moyles and Suschitzky (1997) found that TAs tend to focus on the surface features of teaching; the apparent focus of the NLS on these same features is both likely to create

and reinforce this tendency. As the deeper features of interactive teaching are considered 'unobservable', and rely more on the professional input and autonomy of the teacher, it would rely on a TA having a tacit understanding of these skills. In addition, it has been suggested that the introduction of the NLS has contributed to: 'a pedagogy with an implicit categorization of teaching as either 'core' or 'peripheral'' (Hancock and Eyres, 2004, p. 233), with teachers being the core, and TAs the peripheral. Hancock and Eyres (2004) suggest that this is unhelpful and ignores the collaborative pedagogical approaches which were previously being built between many teachers and TAs.

The Early Literacy Support programme (ELS) was introduced into schools by the DfES in 2001 and revised by the DCSF in 2007 in line with the new Primary Framework for Literacy and to take into account the recommendations of an independent review into the teaching of early reading (Rose, 2006) to support pupils in year one who, following a series of screening tasks, are considered to be at risk of falling behind their peers in terms of literacy skills. Pupils are selected who are then given an additional 20 minute literacy session each day (in groups of up to 6), outside of the daily one hour NLS session, with the intention that by the end of the 12 week programme (16 week from 2007) pupils should be working on the literacy objectives appropriate for their age and able to fully participate in whole class sessions. Similar intervention packages are in place for pupils in Years 3 and 4 (Additional Literacy Support – ALS, introduced in 1998) and Year 5 (Further Literacy Support – FLS, introduced in 2002). These programmes are essentially more prescriptive than the NLS, in that they provide set lesson plans, activities, resources and a 'full script' (DfES, 2001a, p. iv) for TAs. There is no mention in the materials of any autonomy on the part of the TA in the sense of changing any aspects of the scripts as given, or adapting them according to the responses of the pupils, beyond: 'Some session scripts are based on example texts – these can be substituted with other similar texts' (DfES, 2001a, p. v). These sessions may therefore reinforce the IRE/F structure to an even greater extent. This may particularly be the case where the TA delivering the programme has had insufficient training. The interactions between TAs and pupils working with these materials would need to be analysed to establish whether or not this is the case.

An additional difficulty is that the NLS, despite stating in the introductory section that oral work is an essential part of the literacy hour (DfEE, 1998), covers all the objectives from the NC for reading and writing (broken down into text, sentence and word level sections), but does not incorporate the speaking and listening objectives. It would seem almost inevitable therefore that developing the speaking and listening skills of pupils would begin to take second place to coverage of the NLS objectives, particularly when one considers the number of objectives to be covered in any given term, and the greatly increased amount of technical vocabulary which teachers were now expected to explain, and use with, their pupils:

‘in the materials and examples, the teacher’s objectives and The Lesson Plan must remain sacrosanct, and the emphasis is consistently on maintaining a fast pace and a ‘sense of urgency’ rather than giving time for reflection’

(Merry, 2004, p. 21).

This ‘sense of urgency’ is likely to reinforce the concept of quantity rather than quality, and therefore the IRE/F format. The growing numbers of published schemes providing an ‘off the shelf’ answer to literacy planning and teaching based on the NLS objectives may also have contributed to the decline of focused development of speaking and listening in literacy lessons (Skidmore, 2000).

In 2003 a Primary National Strategy (PNS) was set out in the document ‘Excellence and Enjoyment: A strategy for Primary Schools’ (DfES, 2003a). This brought together the NLS and NNS, and extended the focus to foundation subjects; introduced Assessment for Learning (AfL); and also covered partnerships; leadership and workforce reform. One of the immediate priorities for literacy was set out as:

‘Securing the place of speaking and listening both as a key foundation for literacy and also as an essential component of all effective learning’

(p.28)

This was supported by the introduction of the Speaking, Listening, Learning strategy which acknowledged that:

‘For some time now, teachers have been asking for more support in the area of speaking and listening to complement the objectives for reading and writing set out in the NLS *Framework for teaching*’

(DfES, 2003b, p. 6).

The handbook goes on to give a table of dos and don'ts in relation to teacher talk. For example: 'don't merely ask children to guess what you are thinking or to recall simple and predictable facts; routinely repeat or reformulate what children have said; just ask questions' (p. 8). However, the handbook does not discuss the research evidence regarding the common use of the IRE/F structure, and so the potential problem remains of teachers thinking that they offer more opportunities for pupils' extended contributions than is actually the case. Key here is that the focus needs to be on the quality of the interactions, rather than the quantity. Without sustained training focused on teachers researching their own practice, unrealistic self perceptions may remain. In relation to TAs, the materials may be useful, particularly the 'Group discussion and interaction' strand. However, it would need to be integrated into a programme of research into TA/pupil interaction, the establishment of practice based enquiry and training for TAs, and within the ongoing development of a clear pedagogical role for TAs. Unless this is the case, it remains likely the strategy will be used as a 'checklist' of surface, observable features. As noted by Ofsted (2010a) schools typically have several initiatives under way, making it difficult to monitor impact; only a joined up approach to each initiative, carefully monitored, is likely to change this.

2.5 Conclusion

Drawing on social constructivist theory and research, it has been argued that it is the quality of interactions between participants which forms the basis of quality learning experiences for pupils. This is because scaffolding through the zone of proximal development is achieved through these interactions between the adult and child (expert scaffolding). This scaffolding is jointly constructed by participants and over time the adult would be expected to withdraw the level of support, allowing the child to develop greater independence (self-scaffolding). In a group situation, the interaction between peers can also form part of this scaffolding. Studies of classroom talk have been discussed, but it has been argued that in order to explore the ways in which children's learning is scaffolded, more fine grained analysis of the moment by moment learning interactions is needed. Relevant studies of interactions between teachers and other adults working with children in educational contexts have been considered.

2.6 Key issues and research questions

There are a number of significant issues arising from the literature discussed in this chapter which warrant further investigation through empirical research. It is clear that TAs have a significant responsibility for those learners who are at risk of underachievement in literacy through the teaching of literacy intervention sessions. What happens in the interactions during these sessions and the ways in which these interactions affect pupils' learning experiences has yet to be established through empirical research. Scripted materials are provided for use by TAs, though three important issues have been established:

- 1) It is not likely to be possible to follow a script without any deviation due to the complex nature of the interaction and the many variables involved: 'even a teacher giving the same prompts would never receive exactly the same replies from the learners' (Seedhouse, 2010, p. 19).
- 2) The key to effective learning and teaching lies in how effectively the participants are able to co-construct knowledge through the interaction (how skilled they are in chaining together utterances and orienting to the learning goal) and how effectively pupils' responses which indicate troubles are heard and responded to by adults (scaffolded).
- 3) The group context in which these sessions occur is different to a whole class situation. It cannot be presumed therefore that the interactional structures (such as the dominance of the IRE/F structure) are the same.

In order for these interactions to provide a quality learning experience, TAs therefore need to be skilled in selecting and using a range of strategies for organising talk, and be skilled in locating and responding to trouble sources. They also need to know how to be able to support the development of skills for engaging with dialogic talk. There are no studies which currently provide evidence in relation to TAs' ability to do this during intervention sessions.

The research questions asked were:

1. How is turn bidding and turn selection organised during literacy intervention sessions?

It has been argued that maximising active engagement and participation in the moment-by-moment learning experience is essential in maximising pupils' opportunities for learning. The ways in which participants orient to each other and to the learning goals are therefore of interest when studying moment-by-moment interactions during intervention sessions. Opportunities for pupils to develop the skills of active listening and dialogic pupil/TA and pupil/pupil talk would support individual knowledge and skill development, and provide opportunities for practising group talk skills. The organisation of turn bidding and turn selection (as an indication of the extent of equal and active participation in the interaction) will be addressed in chapter 4.

2. What repair practices are used by TAs and pupils when troubles arise?

Expert scaffolding has been discussed as key to developing knowledge and skills of learners. In particular, the ways in which the TA monitors responses, provides adaptive support and encourages the pupil to take increasing responsibility (contingent teaching) is of interest. In CA this involves considering other initiated repair practices and the extent to which these encourage the learner to draw on their own resources to repair the trouble, and encourages the development of self-scaffolding to ensure handover. This will be addressed in chapter 5.

3. What general practices are used by TAs and pupils for the management of topic during literacy tasks?

4. What visual and non-verbal cueing practices are used by TAs and pupils for the management of topic during literacy tasks?

Dialogic talk offers the opportunity for a balanced dialogue between participants. It has been argued that the initiation and feedback moves by adults can support genuine and extended dialogue, which chains together utterances in ways which build on each other. The extent to which pupils are encouraged and supported to initiate, extend and develop topic, and build on the contributions of the TA and each other are therefore relevant. Returning to scaffolding, although it is likely to be necessary for pupils who are

operating at a level below their peers to be provided with a higher level of support, it is also necessary for this to be carefully calibrated to ensure that they are suitably challenged and are provided with the opportunity to acquire and practise self supporting strategies. The use of cues and prompts during initiation and feedback moves is therefore of interest. Questions 3 and 4 will be addressed in chapters 6 and 7.

5. What are the implications of these practices for the moment-by-moment learning experience of pupils?

The implications will be addressed in the findings chapters (4-7) and then drawn together and discussed in broader terms in chapter 8.

Chapter 3: Research design, methodology and methods

3.1 Introduction

This chapter will first provide a rationale for the research design of the study. This will explain and justify the methodology (putting it in the context of the field of linguistic ethnography); methods of data collection; and method of analysis. It will also discuss alternative approaches in order to explain why these were not taken. The second part of the chapter will then discuss the details of the research process in more practical terms, including the ethical procedures undertaken.

As an overview, the methodology was a multiple-case study, achieved by collecting unstructured non-participant observation data of naturally occurring episodes (literacy intervention sessions involving TAs and small groups of pupils) through video recording. Some secondary, contextual data in the form of teaching materials, questionnaires, and interviews were also collected. CA methods were used to select and analyse sequences of the talk-in-interaction.

3.2 Issues related to the research design

It is important to note that there have been few studies of the moment-by-moment interactions of TAs and pupils (Alborz *et al*, 2009) with studies instead often being focused on the statistical results of intervention projects and the perceptions of teachers regarding the contributions made by TAs. However, it is argued that when considering the pedagogical role of TAs, the study of these moment-by-moment interactions is key as:

‘By revealing the character of the interactive work that constitutes the enactment of pedagogy, we are able to reflect in a grounded way on the instructional design to which such activities pertain’

(Gibson, 2009, p. 709).

If, as established through the examination of the literature, socially shared cognition is seen as pivotal to teaching and learning then an approach is required which allows the very close examination of the ways in which socially shared cognition is acquired,

confirmed and revised (Schegloff, 1991). As it cannot be assumed that interactions in TA led literacy intervention groups share the same discourse practices as those established through empirical research in classroom contexts, an inductive, ethnographic approach was appropriate for exploring the area under study and for then considering how certain aspects of talk-in-interaction in similar circumstances might operate (Perakyla, 1997; Robson, 2002). This involved close analysis of the discourse practices occurring in naturally occurring episodes; the only feasible way to begin to build theory is through naturalistic observation and fine grained, inductive analysis of episodes.

Therefore an exploratory multiple-case study design was used (Yin, 2009). This design allowed for a relatively small number of cases (eight teaching groups) to be studied in depth. For practical reasons the selection of participants was through opportunistic sampling. This was appropriate however as the multiple-case study design was theory building and therefore more concerned with replication than population sampling (Yin, 2009). However, the events recorded were all of a similar type (literacy intervention sessions led by TAs outside of the classroom).

The approach taken to data analysis was theory seeking, using analytic frameworks taken from CA. Theoretical sampling was therefore used to isolate sequential sections of data which were of interest in relation to the research questions (specifically, turn organisation, repair practices and topic management practices). Through searching for and analysing all similar examples, these collections were used to build theory in an inductive way.

A common criticism of case studies is that they are not easily generalisable. However, the use of multiple-case study means that any developing theory is more generalisable:

‘Analytic conclusions independently arising from two cases, as with two experiments, will be more powerful than those coming from a single case.’

(Yin, 2009, p. 61)

However, it must be recognised that:

‘case studies, like experiments, are generalizable to theoretical propositions and not to populations or universes’

(Yin, 2009, p. 15).

Therefore, the most that can be claimed of any theories derived is that they may be applicable in a similar contextual situation. Comparison of the analysis from the current study with other studies which have used similar approaches and studied similar practices can also help to build generalisability.

3.3 Linguistic ethnography

It would be helpful at this point to place the research design being used in the context of the broader field of linguistic ethnography (LE). In 2008, Creese described the term as an umbrella term ‘in its infancy’ (p. 229) drawing together an eclectic range of disciplines from linguistics and ethnography with the purpose of using principles and techniques from each to strengthen analysis of language in context. The basis for analytical study is the investigation of context through fine grained linguistic analytic strategies (Rampton, 2009). Education has been a focus for LE, with studies of classroom interaction from both a Neo-Vygotskian perspective (with a cognitive focus) and from a cultural context, forming a key area shaping the field (Rampton *et al*, 2004).

LE assumes that ‘persons, encounters and institutions are profoundly inter-linked’ (Rampton, 2009, p. 1). Although an individual study may be theoretically and analytically more or less concerned with each of these areas, the field as a whole allows for links to be made between studies; increases the need for rigorous and well supported analytical conclusions which stand up to scrutiny from other analysts; and offers a forum for engaging with a wide range of theoretical and practical public debates. As explored by Tusting and Maybin (2007), LE is an interdisciplinary field, with studies often drawing on similar perspectives and key theories; for example, the concept of social constructivism and the work of Bakhtin, which are of underlying importance in the present study.

The study undertaken aimed to examine the moment-by-moment interactions of participants through the framework of CA, one of the frameworks considered key in LE

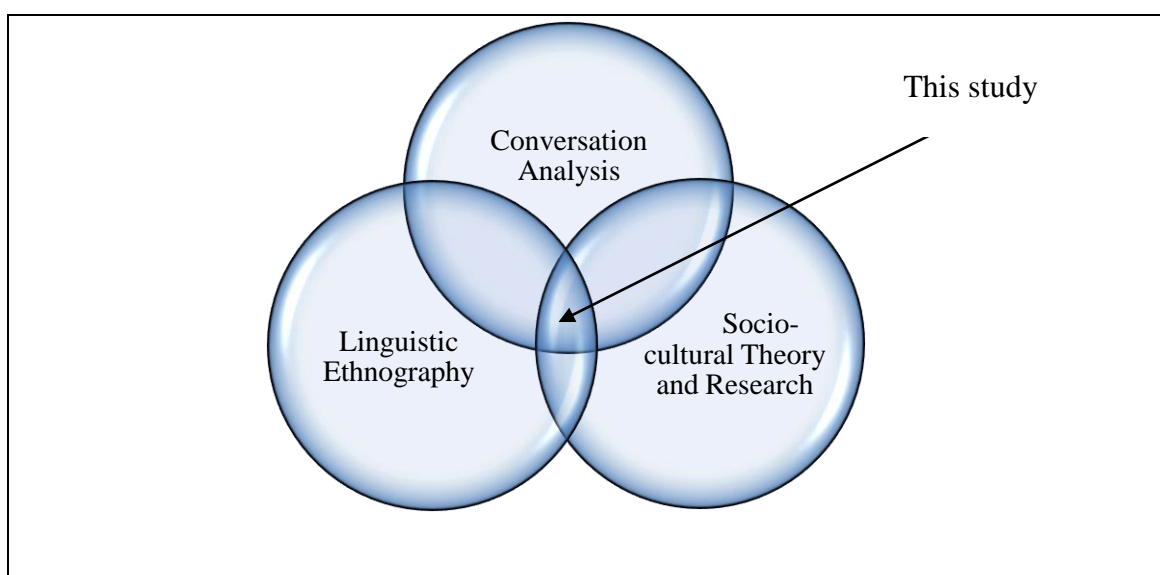
for offering fine grained analysis. The focus is therefore on what Rampton (2009) describes as ‘situated encounters’, particularly the consideration of sequences of linguistic actions as interpreted by the participants. This allows an examination of how the context is created and interpreted by the participants. As will be discussed in relation to ‘pure’ and ‘applied’ CA, there are discussions around the extent to which analysis of talk-in-interaction should use contextual information. Indeed: ‘context’ is often reducible to the immediately preceding and subsequent turns in the conversation’ (Kitzinger, 2000, p. 173). By placing this study within the field of LE, the consideration of context is considered to be relevant, although this should be ‘investigated rather than assumed’ (Rampton, 2009, p. 1). This requires that the analyst is aware of various levels of possible context, drawing on sources of wider contextual information as appropriate.

An area of potential difficulty in relation to LE is that CA does not start with considering theoretical positions or social theories (for example, around gender, ethnicity and social positioning). However, it does not discount these as member categories, recognising as relevant when categories are ‘talked into being’ for specific purposes and in specific contexts (although there are arguments for the use of ‘common-sense’ categories such as gender in CA; for example, Weatherall, 2000). In order to widen the relevance and discussion of CA studies in relation to educational theory and practice, it is important that studies are considered in relation to the wider umbrella of disciplines included in LE. It is considered an aim of this study to inform policy and practice, and therefore making links between the findings and conclusions drawn and broader literature which is sympathetic to the approach taken is a key goal. As Perakyla (2006, p. 176) notes, the results of CA studies may complement or correct but the key point is that they should aim to ‘enhance dialogue’.

Mercer (2010) makes a case for considering LE as a methodology, setting it as distinctly separate from socio-cultural methodology. Describing LE as more concerned with exploring identity and culture, and socio-cultural research with exploring the links between the intermental and intramental, with the associated focus on interthinking and scaffolding, Mercer argues that socio-cultural researchers therefore have a ‘directly ‘applied’ orientation’ (p.3). This suggests that work within the LE umbrella is less concerned with interthinking and scaffolding and therefore does not have this same

applied orientation. He also reflects the argument made by others that CA might better be considered a methodology than a method. Potentially therefore there are three separate methodologies involved in this study – LE, socio-cultural and CA. However, the researcher would argue that these are not mutually exclusive, and if not considered as distinct methodologies can be helpfully combined to explore and develop theory in an area of interaction not previously explored. Within the field of LE, the current study uses socio-cultural theory and research to support theoretical sampling and to draw out the implications of the practices examined by the use of CA as an analytic method. It is therefore a LE approach with an applied orientation. Figure 1 summarises the overall approach taken in the current study.

Figure 1 The approach of the current study



3.4 Issues associated with the methods used

3.4.1 Sampling and the definition of a case

The sample would best be described as purposeful in relation to the activity type, but opportunistic in relation to the individual groups from which data was collected. Purposeful sampling in relation to activity was necessary as the research was particularly concerned with the exploration of interactions during TA led literacy intervention sessions, rather than the involvement of TAs in literacy activities within the classroom. Wave 2 intervention sessions however vary in type so it was necessary to ensure through document analysis that the interventions which formed part of the

sample were all sufficiently similar in relation to the materials provided and extent of ‘scripting’.

An important decision had to be made as to what should constitute a case. Each TA, session, teaching group, school, key stage, or type of materials used could have constituted a case. Consideration was given to each TA being defined as a case irrespective of which group they were working with, but this would have downplayed the contribution of the pupils as co-participants, presuming that the TA imposes a discourse structure on the group. It was decided therefore that it was the teaching group (TA and pupils) which should be considered as a case as it was the nature of the interactions between the participants of each of the groups (TA and pupils) which were of interest. Therefore if a TA worked with more than one group, each group was considered as a separate case.

3.4.2 Observation of interactions: possibilities

Robson (2002) describes two observational methods: participant observation and unobtrusive observation. In participant observation the researcher would either be, or seek to become, a member of the group being observed. It is normally designed to collect qualitative data. This approach would not be suitable for studying the interaction of groups which are already established and which do not include the researcher (in this case, already established teaching groups). Additionally, interpreting data becomes more complex when the researcher is part of the interaction under analysis, as it becomes more likely that subjective remembrances of ‘intent’ may be relied upon.

Structured observation procedures are a common approach in the study of classroom observations. These use a ‘detached, ‘pure observer’ stance’ (Robson, 2002, p. 325), and are a way of quantifying interactional features through the use of predetermined categories. Studies have established that there are some linguistic patterns, or structures, which are commonplace in classroom talk between teachers and pupils. In particular, there is an exchange structure which has been shown to be characteristic of classroom talk-in-interaction: the IRE/F (Initiation-Response-Evaluation/Feedback) (Cazden, 2001) (a full explanation has been given in Chapter 2). This has led to many studies which have used this structure as the basis for developing predetermined coding

systems for studying teacher/pupil interactions, with set criteria for deciding when an utterance should be placed in each category. For example, adapted versions of the ORACLE (Observation Research and Classroom Learning Evaluation) Teacher Record (Galton, Simon and Croll, 1980) have been used to study interactions between teachers and pupils in the literacy hour (see, for example, Hargreaves *et al*, 2003). Other coding approaches have created new taxonomies of teacher talk categories (including, for example, behaviour management and housekeeping categories) (Flynn, 2007) or adapted the 1975 Sinclair and Coulthard IRF structure in similar ways to ORACLE (for example, Hardman, Smith and Wall, 2005; Mroz, Smith and Hardman, 2000; Nassaji and Wells, 2000; Smith *et al*, 2004). Often these coding systems have broken down each of the IRE/F stages into further possible units. For example, questions (one type of initiation) may be further split into coding categories such as closed or open-ended.

There have been critiques put forward, as this approach relies on the analyst interpreting the categories, and then making subjective judgments about the intent of the speaker (see Scarth and Hammersley, 1986 for a full discussion of this issue) or the interpretation of the utterance by other participants. Often an utterance can only be placed into one coding category; therefore there is a reduction in the possibilities for recording one utterance as being heard differently by different participants. Items which are coded one way by the researcher, based on the criteria for the coding system being used, may be understood by one or more participants as performing a completely different action (Hauser, 2005). It has been argued that the use of micro-ethnographic analysis can help to mitigate these problems when working from recorded observational data, by allowing coding systems to be adjusted to improve validity and reliability, and exploring interactional instances which are problematic in terms of coding (Snell, 2011). A key advantage of structured observation is that the same coding system could be related to any data set, even across decades as in the Hargreaves *et al* (2003) and Galton *et al* (1999) studies.

McIntyre and Macleod (1986) argue that:

‘there is a need in studying any aspect of classroom activity both for flexible observation to generate useful perspectives and hypotheses and for systematic observation to provide precise descriptions and to test hypotheses.’

(p. 23)

The intention of the researcher in this study was not to quantify interactional behaviours, but to explore the complex ways in which participants use all available linguistic and paralinguistic resources and gesture to renegotiate the meaning of talk-in-interaction on a moment-by-moment basis. As will be discussed, CA does provide very 'precise description', but in a different way to that which McIntyre and Macleod are discussing (by 'precise' they appear to mean 'quantifiable'). The precise descriptions provided by CA can be used to identify collections of similar cases and therefore build theory in relation to the practices in use. An approach such as structured observation would have required the features of interaction which were to be focused on to be decided on before the data collection; this would not be possible as there is no available theory available in relation to the interactions between TAs and pupils during literacy intervention sessions. Current data from structured observations of TAs has shown which pupils TAs interact with and in what contexts (Blatchford *et al*, 2009a, for example). The purposes of this study however necessitated a different form of observation method and analysis which would allow for the moment-by-moment details of these interactions to be explored in an inductive way.

3.4.3 Issues related to observation data collected

Unobtrusive, unstructured, observation was decided on as the most appropriate method. This was because the main intention was to describe and explain from the participants' perspective the discourse patterns being used, and to develop theories in relation to the talk-in-interaction occurring. This type of observation provided the naturalistic data required to do this. Audio recordings were considered, particularly as it was thought possible that audio equipment is less intrusive than video equipment. However, Jordan and Henderson (1995) suggest that participants soon become habituated to the presence of the camera, and video was preferable in recognition of the fact that language is one mode of communication, but many others may also be in use (Flewitt, 2006). Observational video recording as a data collection method allows complex details of the interaction to be recorded, something which simply would not be possible through any kind of real time observation and note taking or by consideration of an audio recording (Jordan and Henderson, 1995). Any verbal action may be coordinated with a physical activity on the part of a participant which then forms part of the turn, or a physical activity may constitute a turn in its own right (Heath, 1997). In particular, it

was felt that non-verbal cues such as gaze (Goodwin and Goodwin, 1986); head movements (for example, nodding); and hand gestures may be relevant in repair sequences and data in relation to these therefore needed to be available for analysis. In addition, for larger groups (up to six pupils and a TA) it was reasoned that video would support the process of matching utterances to participants, which would be likely to prove difficult with only audio for the researcher who was unfamiliar with the voices of the individual pupils.

It could be argued that video recording allows an actual record to be taken of what is happening in the interaction, as opposed to an interpretation of what is happening (as with observation notes), or what has happened (as with interviews). Jordan and Henderson (1995) discuss this issue:

‘the crucial point here is that secondary interpretation has crept into what we think of as the primary data...In a fundamental sense, the events themselves have disappeared; what passes as data is actually their reconstruction’

(p. 51).

Transcripts should be considered secondary interpretation, and it is important to keep in mind that the recording remains the primary data (Hutchby and Wooffitt, 1998). It should be noted, however, that video data does not objectively reflect the reality of the situation. Decisions about where the camera is positioned and what is recorded, and the limits of the technology in capturing all of the sensory detail and the experience as ‘lived’ by the participants all mean that video does not provide unproblematic ‘objective’ data (Jordan and Henderson, 1995). Therefore, the evidence to which the recording gives access to is always partial (Plowman and Stephen, 2008).

3.5 Issues related to the data analysis approach

A range of approaches to analysing interactions are available. As discussed, this study required an approach which would allow the study of talk-in-interaction to be carried out in an inductive way in order to build theory. The literature in relation to social constructivism suggested that the turn by turn sequences in an interaction were of utmost importance as knowledge is co-constructed through these sequences. An approach which allowed for fine grained detail such as paralinguistic features and gesture was also considered important as studies of moment-by-moment interactions

had shown these to be relevant (Goodwin and Goodwin, 1986; Radford, 2009). CA was therefore chosen as the analytic framework. There are two types of CA: pure and applied. Both types utilize data consisting of naturally occurring episodes of interaction and offer the same rigorous set of procedures for studying talk-in-interaction, though applied CA has focused more on episodes occurring in institutional settings:

‘If a distinction is to be drawn between CA and applied CA, it is not to be found in methodological difference but rather in terms of the phenomena to which attention is directed and the relevance of the research to training or professional development’

(Richards and Seedhouse, 2007, p. 3)

Applied CA allows for unmotivated looking (the setting aside of presuppositions and considering the full detail of the interaction) but motivated analysis, as it is likely that the analyst will have an interest in the goals of specific institutional activities (for example, scaffolding would be of importance to those studying interactions in education setting as it is necessary for achieving learning goals). As will be discussed in the following sections, CA shares the same fundamental ideas as social constructivism and therefore offers an ideal framework for analysing co-construction through social interaction.

3.5.1 Conversation analysis: an overview

Although argued by some to be a discipline in its own right (Schegloff, 2005), CA can also be regarded as a methodology which is inter-disciplinary, as resources may be brought to bear on the data which originate in a number of different disciplines, such as linguistics and sociology (Hutchby and Wooffitt, 1998). In this study, however, it is being used as an analytic method within a methodology best described as multiple-case study.

Developed from ethnomethodology, CA assumes that: ‘social action is accomplished through the participants’ use of tacit, practical reasoning skills and competencies’ (Wooffitt, 2005, p. 73). It is the study of talk-in-interaction, using naturally occurring data, in order to make these skills and competencies (which have become naturalised to the point that they are no longer consciously noticed by participants) visible. It assumes

that talk-in-interaction is worth studying in its own right for this reason, offering an ‘emic’ perspective (Seedhouse, 2005).

CA treats the recording of the talk-in-interaction as the data, rather than any transcripts produced. Using ‘unmotivated looking’ (particularly in early exploratory phases, after which the analyst looks for occurrences of the phenomenon in question), CA takes an inductive, data driven approach to analysis, rather than being led by theory (Wooffitt 2005). Transcriptions are produced, the development of which is considered a key part of the analysis, as it involves repeated listening and adjustment (Hutchby and Wooffitt, 1998). When transcribing, decisions have to be made as to what is included, and what therefore is excluded. This is an important issue as:

‘even the most minor or apparently irrelevant speech events may be interactionally significant, and exhibit a previously unimagined orderliness’

(Wooffitt, 2005, p. 11).

This allows for detail to be included in terms of length of pause, paralinguistic aspects (such as intonation) and gestures where these are proved to be relevant to the participants’ interpretations. Where these are not proved to have a bearing they are not included as erroneous transcription detail is likely to make it more difficult for the reader. This does need to be balanced with potential validity and reliability issues however, and so ideally the raw data would be made available to those accessing the research.

CA places a strong emphasis on the linkage between utterances, a key point if knowledge, understanding and context are seen as socially constructed. However, clearly decisions need to be made over the units isolated for analysis, bearing in mind that:

‘an exchange that appears to have clear boundaries could continue hours or days later, or be a resumption of previous exchanges – the researcher cannot know all parts of the exchange’

(Flewitt, 2006, p. 34).

In particular, where data collected are part of a sequence of sessions, it is likely that talk-in-interaction at any given point (especially in relation to routine tasks) will be a continuation of previous exchanges.

A premise of CA (and interaction analysis in general) is that knowledge is co-constructed through social interaction; the study of talk-in-interaction can make this knowledge accessible to the researcher in the same way that it is understood by the participants (Jordan and Henderson, 1995). A key point, however, is that assumptions cannot and should not be made about the intentions of the participants; only where intentions and motivations are displayed to other participants, and are 'proved' through other participants' recognition of them as such can they be brought into the analysis (Jordan and Henderson, 1995). 'Next turn proof procedure' (Hutchby and Wooffitt, 1998) is the mechanism by which the analysis can be proved through the data. Therefore, whereas other approaches provide the analyst's interpretation of each utterance, CA provides the participants' interpretation of these.

Participants in talk-in-interaction are using language to perform actions; every utterance sets out to achieve something (Schegloff *et al*, 2002). Rather than participants passively playing out structures imposed by the context, CA is based on an assumption that participants are active in orienting to and showing recognition of each other's 'actions', and therefore the context, although influenced by structural norms known by participants, is locally created and negotiated, or 'talked into being' (Heritage, 1997; Hutchby and Wooffitt, 1998; Seedhouse, 2005).

3.5.2 Conversation analysis: application

This notion of context is particularly important when analysing talk which is recorded in what might be considered as highly structured organisations (such as classrooms), and has led to a form of CA referred to as institutional (or applied) CA which 'studies the management of social institutions *in* interaction' (Heritage, 1997). The basic features of institutional talk, presumed by applied CA, are that participants normally orient to goals based on their institutional roles (i.e. teacher/pupil); that possible contributions may be restricted by these roles; and that specific procedures linked to that institution may play a role in talk-in-interaction. For example, in the case of classrooms, it is suggested that turn-taking may be highly regulated because of the large numbers of participants involved (*ibid*).

However, it should not be presumed that these kinds of asymmetries only exist in institutional settings (Heritage, 1997), or that within institutional settings such as

classrooms these role given asymmetries are rigidly adhered to: 'not all teachers assume such rights and few live by such rules all the time' (Cazden, 2001, p.82). Ordinary conversation may be used in this institutional setting for a range of purposes.

Therefore:

'the default analytic orientation needs to be to address 'institutional' data in much the same way as one addresses talk in unspecialized contexts, while being alert to modifications best understood by reference to participants' orientation to the particular circumstances and constraints of the occasion...'

(Schegloff *et al*, 2002, p. 12).

This does not mean that the analyst should not be aware of the context of the interaction, simply that that this context should be seen to be being created by the interaction, rather than existing outside of it (Drew and Heritage, 1992). Heritage (1984, in Drew and Heritage, 1992) discusses the need to be aware of both the immediate context of the utterance being considered, and the larger context of the activity that the utterance occurs in. It can be argued that institutions are 'realised' by the talk-in-interaction taking place, as the participants orient to the immediate and larger context, rather than institutions constraining the interactions in predictable ways (Wooffitt, 2005).

3.5.3 Analytic steps

CA has a well established series of procedures for the analysis of data; these are comprehensively described by Ten Have (1999) and consist of:

- 1) Transcription: As discussed, this is part of the analytic process. Transcription aims to present all linguistic and paralinguistic details in order to support the developing analysis of the phenomena under investigation. This can be seen as translating 'speech' into 'language' (Ten Have, 1999, p. 77). The commonly used transcription system is that of Jefferson (2004), although the researcher may need to adjust or add to the suggested system depending on the specific aspects which are the foci of the analysis.
- 2) The collection of a set of transcribed interactional episodes.
- 3) The analysis of one episode in more depth: adding analytic descriptive detail to describe the specific 'practice/action couplings' (Ten Have, 1999, p. 108).

4) The formulation of general rules: this involves looking across the episode set and referring back to the data (audio or video recording), adjusting the analytic description where necessary and paying particular attention to boundary cases.

3.6 The research study procedures

3.6.1 Sampling

Data was initially collected using an opportunistic sample involving four groups from a primary school in London with which the researcher had a connection. Following this, questionnaires were sent to all infant, junior and primary schools in a second London borough. It was hoped that this would: a) provide useful contextual information; and b) provide further opportunistic sampling. One questionnaire was sent to the person with management responsibility for TAs (for example the SENCo or head teacher) (see appendix 2); this was adapted from a questionnaire used in a published study (Wilson, Schlapp and Davidson, 2002, pp. 82-89). A second questionnaire was sent to TAs (see appendix 3); this was also adapted from a questionnaire used by Wilson, Schlapp, and Davidson (2002, pp. 66-73). Five copies were included for each school, as there was no way to determine how many TAs an individual school might have.

The return rate (despite attempts to follow up non-respondents by both post and telephone) was very low. 20% of schools returned questionnaires, giving a total of 10 questionnaires from managers and 18 from TAs. This was too low a response rate to use data for drawing any general conclusions about the sampled population as a whole, although the questionnaires returned from the schools which later took part in the recordings were helpful in providing background information on the organisation of sessions and the background and experience of the TAs involved. A very low number of those who returned questionnaires indicated a willingness to take further part in the study by being videoed (four schools, dropping to 2 on further explanation of the project) so this self selected sample was taken up without any further selection process being necessary.

3.6.2 Case details

All video data were of naturally occurring episodes of TA led literacy intervention sessions, which incorporated plans and materials produced by either the DfES or the

Local Authority. An overview of each case is set out in Table 1. It should be noted that the number of sessions recorded varied between cases. This is because some cases were initially sessions recorded in order to test the technological aspects of recording, and in other cases the sessions which were recorded were restricted by the number of sessions left in the teaching period and the events calendars of both the schools and the researcher. This is not considered a difficulty due to the theory building nature of the study. Contextual information about each school (taken from the most recent Ofsted for the school at the point at which the recordings were made) is given in Table 2.

Table 1: Overview information for each case

Case study	School	TA	Details of group	Activity type	Session length (mins: secs)
1	A	TA1	Year 1 (5-6 years old) 5 pupils (3 boys, 2 girls)	LA materials	Session 1 (40:22)
2	A	TA1	Year 1 (5-6 years old) 6 pupils (3 boys, 3 girls)	LA materials	Session 1 (35:34) Session 2 (26:36)
3	A	TA2	Year 1 3 pupils (1 boy, 2 girls)	LA materials	Session 1 (37:58)
4	A	TA2	Year 1 (5-6 years old) 6 pupils in session 1 (5 boys, 1 girl) 5 pupils in session 2 (1 boy absent)	LA materials	Session 1 (23:12) Session 2 (29:17)
5	B	TA3	Year 3 (7-8 years old) 6 pupils (5 boys and 1 girl) 5 pupils in session 2 and 4 (1 boy missing)	Additional Literacy Support	Session 1 (46:32) Session 2 (54:09) Session 3 (47:15) Session 4 (43:45) Session 5 (28:23)
6	B	TA3	Year 3 (7-8 years old) 6 pupils (3 boys and 3 girls)	Additional Literacy Support	Session 1 (48:52) Session 2 (51:30) Session 3 (44:11) Session 4 (28:53)
7	C	TA4	Year 1 (5-6 years old) 6 pupils (3 boys and 3 girls)	Early Literacy Support	Session 1 (32:21) Session 2 (38:32) Session 3 (31:27) Session 4 (28:55)
8	C	TA4	Year 1 (5-6 years old) 4 pupils (3 boys and 1 girl)	Early Literacy Support	Session 1 (27:46) Session 2 (33:40) Session 3 (21:08)

Table 2: Contextual information in relation to case study schools

School A	<ul style="list-style-type: none"> • Primary community school • 396 on roll (larger than average) • Above average number entitled to free school meals • 72% of the pupils are described as White British • One in seven pupils does not speak English as their first language • Higher than average mobility
School B	<ul style="list-style-type: none"> • Primary community school • 467 on roll (larger than average) • Broadly average number entitled to free school meals • Pupils from minority ethnic backgrounds much higher than average • Significant number learning English as an additional language • Slightly higher than average mobility
School C	<ul style="list-style-type: none"> • Infant community school • 329 on roll (larger than average) • Below average number entitled to free school meals • Majority of pupils from minority ethnic backgrounds • 75% learning English or are bilingual

The positioning of the video camera and the picture and sound quality was tested in preliminary studies. Positioning of the camera did need to be changed however for each set of recordings, as the sessions happened in very different settings (ranging from a large, quiet library to a garden shed). There were surprisingly few issues with picture or sound quality bearing in mind the contexts; very occasionally a child moved completely out of shot, or an individual utterance was inaudible.

3.6.3 Additional data

For the first four case studies (two groups of pupils with TA1 and 2 groups of pupils with TA2) the data collected consisted of observational data only, and the published materials on which the sessions were based. For the other four case studies (two groups of pupils with TA3 and 2 groups of pupils with TA4) information about the qualifications, role, and training and support provided was also collected by the questionnaire discussed earlier. Contextual information about the ways in which the pupils in each group were selected, and how sessions were planned and evaluated was known to the researcher through personal contact with schools A and B (case studies 1-

6). For school C (cases 7 and 8) a semi-structured interview was carried out with the TA and the literacy coordinator in order to collect this information. The additional data collected was considered secondary to the main data (observational), but none the less potentially useful in giving contextual information.

3.6.4 Ethical issues

The research was designed to meet in full the British Educational Research Association (BERA) revised ethical guidelines (BERA, 2004).

A key consideration was that of ‘voluntary informed consent’. With regard to the adult participants, full information was given prior to the collection of the data. This covered: the focus; method of data collection; and the possible wider dissemination of both the findings and data. The consent form informed adult participants in writing of their right to withdraw at any time. Please refer to appendix 4 for a copy of the letter given to adult participants.

The issue of consent is clearly more complex when considered in relation to young children. The BERA guidelines (2004) set down specific guidance for research that involves children. This states that ‘children should be facilitated to give fully informed consent’ (p. 6). Every effort was made, in consultation with the head teachers of the schools, and the TAs involved, to explain the purpose and methods involved in the research and to gain children’s verbal consent with regard to video collection.

However, it could be contested that at least some of the children are not of the age that they could be expected to fully understand their role. The parents or guardians of the children involved were therefore written to. A copy of the letter can viewed in appendix 5. This letter outlined the project (in the same way as explained above with regard to the information to be given to adult participants), and asked for their written permission both for their child to participate in the initial data collection and for the data to be disseminated. This is a particularly important point as the data consisted of video. If the original data were to be made available to other researchers, or used to illustrate the research findings in the public arena, then anonymity could not be guaranteed in the same way that the names on a transcript could be changed. Therefore specific permission was required for the future public use of the video data (Loizos, 2000). This point is discussed in detail by Jordan and Henderson (1995, appendix C). Full

permission was given for all children except for one child in case study 7, whose parent agreed to all aspects except for the use of data by other researchers. This was acknowledged in writing by the researcher, and as a result the relevant video data extracts have been included for examination purposes, but will be removed before public access is permitted to the thesis.

The Data Protection Act 1998 (Great Britain) was followed in full. In addition to the points made above, all original data has been kept securely in a locked cabinet, to which the researcher has sole access, and video data converted to an electronic format has been password protected. Full records will be kept of any disclosures to third parties for the same research purpose. The Data Protection Act also demands that data is destroyed as soon as there is no longer a need for it. Clearly it is difficult to specify an exact date for this at this time, as the data may well be required for projects investigating interactions between TAs and pupils beyond this one. However, if a point were reached where the data was no longer required then the tapes would be destroyed and all electronic files deleted from the relevant hard drives.

3.6.5 Data analysis and interpretation

The general procedures used by CA as set out previously were followed:

1. Unmotivated looking was employed to find a sequence of interest in one of the three areas of interest (the organisation of turns, repair practices and topic management practices), which was then transcribed in relation to the words spoken and any obvious gestures or silences.
2. This transcribed episode was then used as a basis for finding similar instances across the data set. As each similar instance was identified it was carefully considered in relation to the developing collection; instances which appeared to be similar but differed in some way from others in the collection were included at this stage.
3. One episode which was considered 'typical' was analysed in more detail using an adapted version of the transcription conventions described by Jefferson (2004) (the full list of conventions used are provided in appendix 6). This involved repeated viewing and the adding of all available linguistic and

paralinguistic features and gestures. Particular attention was paid to identifying the action being performed in each turn, as shown by the next-turn proof procedure. The transcription was adjusted as the analysis developed to remove features which were shown by the next-turn proof procedure to be not relevant.

4. General rules were identified by looking across the episode set. Boundary cases were carefully considered as to whether they belonged in the set or demonstrated a different practice. Where they were identified as different, these were used to build new collections.
5. The above steps were repeated to look for other practices related to that which was identified.

Already touched on has been the need for the researcher to guard against imposing theory during the analytic process. However, links to existing learning theories (and the author's personal theories) need to be made if the findings are to move beyond identification of patterns. This supports the exploration of the implications of these patterns for the learning experience of the pupils involved, in order that aspects of good practice can be highlighted and suggestions for changes or refinements to practices can be suggested. It then allows wider generalisations to be made. It is helpful here to separate the process of CA (the analysis) and the interpretation. The CA analytic process can answer the research questions:

1. How is turn bidding and turn selection organised during literacy intervention sessions?
2. What repair practices are used by TAs and pupils when troubles arise?
3. What general practices are used by TAs and pupils for the management of topic during literacy tasks?
4. What visual and non-verbal cueing practices are used by TAs and pupils for the management of topic during literacy tasks?

However, the final research question (5. 'What are the implications of these practices for the moment-by-moment learning experience of pupils?') needs to draw on existing

learning theories, making links between the participants' practices and what is known to support the learning experience.

3.6.6 The layout of transcripts

The transcripts of the episodes of talk-in-interaction which are presented have been kept tightly focused on the practice examined. However, it may be helpful for the reader to have an indication of the talk-in-interaction around the extract. Therefore the video extracts presented in the DVD (removed, as discussed, following examination) include the interaction immediately surrounding the extract. The full transcripts for each recorded session from which extracts have been used are available in appendix 7 (these are to provide context for the reader and so are verbatim transcripts rather than full CA transcripts, although non-verbal occurrences and pauses considered relevant to understanding the ongoing context have been included).

In each transcript within the main body of the thesis the TA has been assigned the label TA. Each child has been assigned the label C plus a number. In each extract the numbers run sequentially from 1 clockwise, starting with the child immediately to the left of the TA. Where it is unclear which child an utterance can be attributed to it has been labelled as C?. A glossary of the transcript conventions used is provided in appendix 6.

3.6.7 Validity and reliability

The selection of what is recorded, and the picture and sound quality of the recording both contribute to the reliability of the research (Perakyla, 1997). Therefore a preliminary research study was designed to test picture and sound quality. However, it must be acknowledged that when carrying out research in the field, one is reliant on the accommodation offered by schools, so each case is unique in the sense that the camera position is somewhat dictated by physical circumstances. When recording the sessions, each session was recorded in its entirety (the camera was set to record before any participants entered the room, and was not switched off until all participants had left).

Although the data collection method used may be considered 'unobtrusive', and aimed to minimize observer effects in that the researcher left the room before the participants arrived, clearly it would not be ethical not to make participants aware that they were

being videoed, and so the video camera was always clearly visible to participants. Therefore tapes were checked for any changes in behaviour of the participants which appeared to be related to the presence of the camera (Jordan and Henderson, 1995). Aside from some initial acknowledgement of the camera by participants in initial sessions, no such changes in behaviour were noted.

Motivated analysis can be a potential threat to validity, in that when there is a particular interest in specific aspects of talk-in-interaction because of its potential for understanding and improving practice it is possible that the researcher may unconsciously impose theoretical or hypothetical models on the data during the process of analysis (Richards and Seedhouse, 2007). The researcher has a detailed understanding of the wider institutional context in which the talk occurs (classroom interactions) and therefore needed to guard against assumptions based on their own remembered experiences. Care was thus taken to rigorously apply the analytic procedures of CA which guard against these issues. The 'next turn proof procedure' already described was a key aspect of this, as was the 'checking' of analysis by others.

Video (or audio) recording allows the same segment to be played repeatedly during analysis. Therefore, rather than assumptions being made at the time of transcription, on which all future analysis must then be based, any analysis can be checked and rechecked, both by the researcher and by others. In this sense the recording becomes 'the final authority' (Jordan and Henderson, 1995). The 'chain of evidence' (Yin, 2009) is therefore wholly available to allow an external observer to follow the formation of any theories, although it should be noted that transcripts are more likely to be viewed by external observers and in one of the cases, as discussed earlier in this chapter, only transcripts are available for ethical reasons.

Detailed transcripts contribute both to the reliability and the internal validity of the research as it is the means by which an emic perspective is proved. It easily offers the opportunity for others to test the validity of the claims being made (Seedhouse, 2005). However, there are particular issues in relation to accurately transcribing the interactions of a group, as overlapping talk is much more likely to occur. Additionally, direction of gaze can be more difficult to determine, and numerous non-verbal gestures can occur simultaneously. An ongoing issue in relation to the study is working on a

transcription format which can effectively portray all of the relevant linguistic and paralinguistic activities, and gestures of all participants of a group. This has implications for analysis, as the development of the transcript is a key part of the process. It also has implications for dissemination, as transcripts need to be accessible to researchers from a range of backgrounds, as well as practitioners. This fine balance between engaging a wider audience whilst maintaining reliability and internal validity is well expressed by Hammersley:

‘...we need to make the nature of the evidence we are using clear to our audience; and very complex and detailed transcripts may not serve us very well in this... On the other hand, we ought to want to provide readers with data and evidence in a form that allows them to at least consider whether alternative interpretations to those put forward by us would be plausible.’

(2008, p. 10)

In addition, connections have been made between developing theories and other relevant studies. This allows the researcher to compare developing theories with those already established. In the study being undertaken, there is very little research using CA which relates to mainstream educational settings, and none found in relation to literacy intervention sessions. However, there is a great deal of research which has established general theories in relation to turn taking and repair, and in educational contexts such as second language classrooms and classrooms of children with SS LD. It is then for the researcher to prove, if a discrepancy occurs, that the specific context being studied is the cause of the adaptation.

Chapter 4 Results: Turn taking

4.1 Introduction

In this chapter ways in which talk is organised during literacy intervention sessions will be explored using CA as an analytical framework, in order to answer the research questions:

- How is turn bidding and turn selection organised during literacy interventions sessions?
- What are the implications of these practices for the moment-by-moment learning experience of pupils?

The techniques which have been established by CA studies to exist for turn allocation (turn bidding and turn taking) in mundane conversation have been outlined in chapter 2, together with the ways in which these techniques have been shown to have been adapted in institutional learning and teaching interactions.

As yet the context of TA led literacy interventions sessions is unexplored; it cannot be presumed that the techniques in use are the same as in whole class, teacher led group, or peer group learning situations. Therefore, specific techniques for turn taking and turn allocation which have been found in the empirical data are explored in an inductive way. This will involve showing how participants in the interaction orient to each other and the learning goal on a turn by turn basis. The analysis will specifically consider instances of turn taking which will be shown to cause interactional difficulties which have implications for the learning of individual pupils and/or the group as a whole. The findings are discussed in terms of beginning to build theory in relation to turn taking practices; the implications of this for policy and practice are identified, and will be expanded in chapter 8.

4.2 Overview of results

It is apparent in the data that turn taking is oriented to by participants in two ways:

- 1) As an overarching organisational principle in relation to the task being undertaken (different tasks can be shown to have different overarching organisational principles).

2) As a way of organising sequences of talk between participants on a turn by turn basis during the task (for example, to repair troubles or scaffold learning).

Two specific turn taking techniques were identified in the data which are of interest. They show that when participants orient differently to the turn taking of the task and the turn taking between individuals this can a) cause interactional difficulties and b) directly affect the learning experience of individual pupils and the group. These turn taking techniques are **sequential turn selection** and **turn bidding by pupil raising hand**. In the case of sequential turn selection it was found that the TA strongly orients to the organisational principle of the task (that pupils take turns in relation to the task) rather than the learning experience. During activities TAs control the turn exchange mechanism in the same way as teachers have been found to do in classrooms in whole class teaching (Nassaji and Wells, 2000) and group contexts (Skidmore, Perez-Parent and Arnfield, 2003). It was also found that pupils do not always orient to the individual moment-by-moment interactions between TAs and other pupils within the activity structure turns. This creates both interactional and learning troubles, and prevents pupils taking up learning points as a group. Turn bidding by pupil raising hand, also causes troubles when it is sustained and unacknowledged (in that the pupil does not orient to the turns which come after their bid until they are selected).

An overview of the spread of data in relation to turn taking can be found in Table 3 (on the following page). This shows how often the practices presented occurred in the data. It should be noted that only cases 1 and 3 contained book reading activities, and the schools from which data 3 and 4 were obtained operated a no hands up policy – N/A has therefore been marked on the table to indicate this. Where data has not been provided for phenomena, this is because they are unique; they show a practice rather than suggesting it is general.

Table 3: Turn taking: overview of data

	Number of sequential turn selection activities	Number of times turn taking rules stated	Number of times pupils reoriented to another pupils turn	During book reading activities		Number of sustained turn bids leading to pragmatically inappropriate answer
				OIOR bid rejected by TA	Number of instances of pupil failing to orient to previous repair	
Case 1	1	0	6	3	5	2
Case 2	2	0	2	N/A	N/A	1
Case 3	6	0	7	1	1	1
Case 4	3	0	3	N/A	N/A	3
Case 5	16	5	45	N/A	N/A	N/A
Case 6	13	5	27	N/A	N/A	N/A
Case 7	6	2	7	N/A	N/A	N/A
Case 8	2	1	4	N/A	N/A	N/A

4.3 Sequential turn selection

There are instances of next turn selection being organised so that each subsequent next turn happens sequentially around a group of pupils (i.e. beginning with the first pupil on the left of the TA and continuing with the next pupil to the left, then the next and so on). This technique has been found in the data as an overarching organisational principle in relation to the following activities:

- Games which reinforce phonics skills;
- Book reading, when pupils take turns to read a page at a time from a book;
- Oral discussion where there are a number of possible appropriate responses, for example when TAs' questions ask for pupils' opinions or experiences related to the story.

The expectation that this is the organisation which will be used is sometimes explicitly stated by the TA at the start, as in the following extract.

The game 'Hot Words' is about to be played. Each pupil has a spinner with a variety of phonemes.

Extract 1 from case study 5 session 5 (28:23 long) Turn taking rule stated by TA

04:17 1 TA right ok lets have five minutes of hot words
 2 C4 hot words
 3 C3 hot words
 4 TA [so we've got one, two
Giving out boards.....
 → C1 [oh yeah
 → 5 C4 we havent played that in ages
 6 TA three Ryan four and five
 (0:07 not transcribed)
 → 7 TA right have a little practi↑ce and then we'll um (1.5)
moving pens and books on desk
 8 C4 I've got pans
 → 9 TA go round in turn

In line 7 in the above extract there is an 'um' and 1.5 second pause and then a practice turn from C4 ('I've got pans') before the words in line 8 'go round in turn'. It is possible that the TA is mentally selecting from possible organisational devices. More likely however is that she recognises at this point the need to state the turn taking structure to the group before the activity begins. In line 4 C1 displays that he has just recognised the activity at the point at which the boards are given out ('oh yeah'), and C4 states the fact that it is not a recent activity ('we havent played this in ages'). Line 6 can therefore be seen as the TA orienting to these turns by the pupils and providing a direct reminder of the turn taking rules.

Various interactional devices are then used to signal both who is to have the next turn (i.e. the first turn in the game) and that other participants are expected to orient to that pupil's turn. This is shown in extract 2.

Extract 2 from case study 5 session 5 (28:23 long) Reorienting pupils to another pupil's turn

04:44 1 TA thats it right ok Sham [lets start with you
turns head to pupil C1
 C4 [Nicola do you think
 → TA what have you got sh sh sh sh
turns head to C4

The pupil selected to take the first sequential turn is the pupil to the TA's left, and this reflects a tendency across the data. That the activity is starting, and that C1 is to have the first turn is clearly indicated in a verbal way by the TA's 'right Sham', reinforced by

her turning her head towards C1. During the continuation of the TA's turn (which is directed at C1 – shown by the TA turning their head towards them) C4 begins an interaction with another pupil ('Kiera do you think'). The TA waits until she has finished her turn directed at C1 ('what have you got') before directing a turn at C4 to reorient her and the pupil she has begun an interaction with back to the interaction between her and C1 ('sh sh sh'). This shows a strong orientation to the sequential turn taking organisation of the activity by the TA.

However, although the TA monitors the group for their orientation to the activity, there is evidence that TA and the pupil whose organisational turn it is are oriented to a one to one teaching and learning sequence rather than a group interaction during the moment-by-moment turns which occur, and that the TA actively works to ensure that each interaction remains as a one to one by ignoring or rejecting bids by others in the group. This, together with the interactional and learning troubles caused, will now be explored in depth in relation to book reading and oral discussion activities.

4.3.1 Sequential turn selection during book reading activities

When this format occurs and is focused purely on the decoding aspects of reading there is evidence that the TA and the pupil whose turn it is can be engaged in a one to one rather than a group interaction. The TA actively works to ensure that each interaction remains as a one to one by ignoring or rejecting bids by others in the group. The following sequence is an example of the TA rejecting a bid by another pupil to decode a word.

The book being shared in the session is 'The computer game' (Mitchell, 2000). The sentence on the page being read is 'Mum said "Come and help me Pete. Grandma is coming!"'.

Extract 3 from case study 1 session 1 (40:22 long) OIOR bid rejection by TA

28:06	1	C2	and (6.0) <i>looking at book</i>
	2	C1	<i>looks at TA then puts hand up</i>
		C2	<i>continues looking at book.....</i>
→	3	TA	<i>shakes head</i> let him read it Jemma you've had your turn
		C2	<i>continues looking at book.....</i>
	4	C2	(9.0) [ummlooks at TA [puts finger on mouth
		C3	[hand up

In line 1 there is an extended pause (6.0) by C2 when the word 'help' is reached. This is heard as a trouble source by pupil C1 who looks at the TA. The TA does not prompt pupil C2, and therefore C1 raises her hand to bid for a turn to provide the word. In line 3 the TA rejects the bid firstly through shaking her head, and then by stating 'let him read it you've had your turn', therefore openly stating the interactional rules of the activity (pupils may only read/take part in the interaction sequentially one at a time, and they will not be permitted to take part in another pupil's turn). As C2 continues to look at the book during this interactional sequence between C1 and the TA, there is evidence that a prompt is not expected to be received from C1 (and therefore evidence that C2 is orienting to the interactional rule that pupils do not provide prompts for each other's turns). That prompting is expected from the TA, not from other pupils, is reiterated in line 4. Another extended pause is then heard, until C2 indicates in increasingly explicit ways that a prompt is required; firstly by looking at the TA, then by saying 'umm' and putting his finger on his mouth. As this verbal indication that prompting is required is started ('umm'), C3 bids for a turn. This bid remains unacknowledged by the TA, who in the following turns continues to focus on C2, reinforcing the interactional rule of other pupils not prompting.

This raises the issue of the reliance of the pupil whose turn it is on the prompting of the TA; the interactional rule in operation means that pupils may see the TA (i.e. the adult) as the only person who is able to support them when prompting is required. This has implications beyond the specific intervention sessions under analysis, as it reinforces a view that the adult is the holder of knowledge and support and therefore may dissuade the pupil from seeking peer support. In a mainstream classroom this has serious implications for times when the pupil does not have one to one reading support.

This also raises the issue of the role in the interaction of pupils who are not the focus of the one to one turn with the TA, and the extent to which they are active learners. In extract 1 some pupils in the group (C1 and C3) are following the interactions which are occurring between the TA and pupil whose turn it is. This is evidenced by the data which shows that pupils are bidding at relevant points (when extended pauses or verbal/non-verbal cues on the part of other pupils indicate the need for prompting).

However, there is also evidence that prompting and repair sequences which occur on a one to one turn basis during these group sessions are not oriented to by some other pupils in the group. The following example shows a repair sequence to decode the word ‘with’, followed by a second pupil in the group needing support to decode the same word three sequential turns later.

The book being shared in the session is ‘The computer game’ (Mitchelhill, 2000). The sentence on the page being read is ‘He wanted to play with it’ The word ‘with’ is a high frequency word at Key Stage 1, and appears a number of times in the text.

Extract 4 from case study 1 session 1 (40:22 long) Complete repair sequence

26:00	1	C1	(5.4) <i>after 4.0 looks at TA</i>
→	2	TA	[sound it out you know this word
		C1	[looks back at book
	3	C1	w I <i>looks at TA</i>
	4	TA	[no it doesnt make an I does it w
		C1	[looks at book
	5	C1	<i>looks at TA ee</i>
→	6	TA	w with <i>nods</i>
	7	C1	with

The extended pause and then gaze directed at the TA by C1 in line 1 indicates that SIOR is being sought. The TA prompts C1 in line 2, with ‘sound it out’ (the strategy of using phonic knowledge to decode letters and letter strings). Following two incorrect attempts at the phoneme /i/ the TA then provides the whole word causing difficulty (‘with’) in line 6, which is repeated by C1, showing receipt of the correction. Evidence that the other pupils in the group were orienting to this repair sequence would be provided by data which showed other pupils in the group when the same word appears during later one to one turns either recognising the word or using a similar strategy unprompted when attempting to decode it. However, the following extract is taken from the same session just three sequential turns later and shows clearly that the repair sequence in extract 4 has not been oriented to by C4; therefore the difficulty resolved with one pupil then has to be resolved with another.

The sentence on the page being read is ‘Pete went back to play with his computer game’

Extract 5 from case study 1 session 1 (40:22 long) Failure to orient to previous repair

31:15 → 1	TA	sound it out Ryan
2	C4	w i t h (1.8)
3	TA	you know those two sounds together make a th sound dont they so the word is w i
4	C4	with

In this extract pupil C4 is unable to read the same word ‘with’ (he first misreads it as what). The same prompt (‘sound it out’) is used by the TA in line 1 in this extract as in the previous extract. When this does not prompt the correct response (the /t/ and final h are sounded out separately rather than as the digraph ‘th’) additional support is given in line 3, and the word is correctly stated by C4 in line 4, showing receipt and use of the additional information.

Although other group members may orient to the activity in order to bid for turns when the pupil reading is unable to decode a word (when indicated by extended pauses), there is evidence that they do not always orient to repair sequences involving the TA and other pupils which occur on a one to one basis. The activity therefore does not develop the reading skills of the group as a whole; each difficulty has to be resolved with each pupil separately. This has implications for the organisational aspects of literacy intervention sessions; the issue that has to be considered is whether a group situation which has individual pupils engaged during their own individual interactions with the TA, but not during the interactions between the TA and other pupils is the best overall use of resources.

4.3.2 Sequential turn selection during oral discussion activities

One context in which sequential turn selection techniques occur is during oral discussion activities based around a question where there are a number of possible appropriate responses (for example when questions ask for pupils’ opinions or experiences related to the story). Previous studies have found difficulties in relation to this organisational practice. For example, a study of circle time by Radford, Ireson and Mahon (2006) found that pupils received and used poor examples of grammatical structures from other pupils because of the organisational pattern which does not allow for a follow up turn. The current study has found that troubles can also be caused where this turn selection technique occurs following questions which search for a limited

number of specific appropriate responses. This can cause interactional difficulties when repair points built into the TA's follow up turn are not oriented to by other group members.

The book being shared in the session is 'Doing the washing' (Garland, 1983). The TA has asked the pupils to look at the cover, and read the title to them. The group has been asked what they put in the washing machine.

Extract 6 from case study 4 session 1 (23:12 long) Sequential turn selection for a correct answer

01:44 → 1	TA	your trousers they're they're part of your clothes aren't they what else do you put in your washing machine? <i>looks at CD</i>
2	C4 C6	you put in your washing machine [(3.0) <i>[hand up (after 2.3)]</i>
→ 3	TA	you think about it I'll come back to you [what do you put in the washing machine? <i>[looks at C5]</i>
	C6	<i>continued hand up.....</i>
4	C5	uniforms
	C6	<i>continued hand up</i>
→ 5	TA	[uniforms that's part of your clothes but what what gets your clothes nice and <i>[nods]</i>
	C6	<i>continued hand up.....</i>
	TA	↑clean [what do you have to put in the m[achine? <i>[looks at C6]</i>
	C6	<i>continued hand up..... [hand down]</i>
6	C6	[I know what you put in there you put in there
7	TA	what else do you put in there [James?
	C6	<i>[dirty towels]</i>
8	TA	that's part of your clothes that's part of your laundry what do you put in there <i>nods</i> to get your clothes nice and clean?

In line 1 the TA has indicated that the answer 'trousers' is part of a category 'clothes' which has been given by a pupil twice previously (pupils have been sequentially selected from the left of the TA to answer the question 'what do you put in your washing machine?'); the word 'else' indicates that an answer is required not belonging to this category. By this point, as following turns will show, the TA is asking for a correct answer (washing powder) rather than a pragmatically appropriate answer to the original question. In line 2 pupil C4 does not complete her turn (she does not provide a candidate answer); the silence is responded to by pupil C6 as an opportunity to bid to supply another candidate answer. However, the turn selection continues to move sequentially to the left (to C5). C5 responds the question 'what else do you put in your

washing machine?’ with a further candidate answer ‘uniforms’, which is added to the category clothes in the TA’s follow up move in line 5 (‘uniforms that’s part of your clothes’). She makes it clear however that this is incorrect by adding the word ‘but’ and then adding an additional question to provide a clue as to the correct answer: ‘what gets your clothes nice and clean what do you have to put in the machine?’. However, when the turn moves sequentially to the next left (C6) he responds with another plausible candidate answer to ‘what else do you put in your washing machine?’ The response given is pragmatically appropriate in relation to completing the turn in line 2, and ‘dirty towels’ is different to the category ‘clothes’, so being pragmatically appropriate to the question ‘what else do you put in the washing machine’ (in line 1). However, the response has not taken into account the new question in line 5 ‘what gets your clothes nice and clean’. This reinforces the findings from the previous section in relation to pupils failing to orient to the individual turns between TAs and other pupils, and therefore possible learning opportunities not being taken up. It also suggests that sequential turn selection is strongly oriented to by pupils as a mechanism by which genuine responses are sought rather than one correct answer.

4.4 Turn bidding by pupil raising hand

This section will consider the phenomenon found in the data of unacknowledged sustained turn bidding in response to undirected questions, and show that this can lead to missed learning opportunities through failure on the part of the pupil bidding to orient to next turns.

Walsh and Sattes (2005) suggest the term ‘undirected question’ may be used to define a question posed to the whole group as opposed to an individual pupil. From collecting together all instances of undirected questions (established by the TA not nominating by name or gaze the pupil to respond) it was established that pupils working with TA1 and TA2 bid by raising their hand when they hear an undirected question (it should be noted that the schools from which data for TA3 and TA4 was collected both had a ‘no hands up’ policy for classroom interactions). The TA (the current speaker) then selects the speaker of the next turn (generally from the pupils with their hands up). From looking across these instances it was then established that pupils who bid for a turn when they hear an undirected question end their bids when:

- The next turn selection has occurred (when the TA has nominated the pupil to respond to the question heard);
- When the next turn has been completed (when the pupil nominated has responded to the question heard); or
- When the next turn is completed and a feedback move from the TA has indicated it is the response being sought.

However, there are instances when a bid to respond to an undirected question is made by a pupil by them raising their hand and this bid is **sustained and unacknowledged by the TA** (i.e. the pupil's hand remains up beyond a pragmatically appropriate response being given and accepted). In this case it can be shown that the pupil and the TA are oriented to different activities as, if this bid is later accepted by the TA, the response is pragmatically appropriate to the direct question heard at the point at which the pupil bid. This causes difficulties in that the response given by the pupil is not pragmatically appropriate to the current point in the conversation and therefore causes the need for a repair sequence to be initiated. This was found to be the case in all instances.

This is shown in the following extract, where a sustained and unacknowledged bid from C1 occurs during turns 4-8 (indicated by an arrow), and the pragmatically inappropriate response is given in line 9.

The book being shared in the session is “‘Not me,’ said the monkey’ (West, 1987). During the conversation around the previous double page, the TA and pupils have established a shared understanding that the character of the monkey is naughty, and says ‘Not me’ when challenged about the naughty behaviour.

Extract 7 from case study 2 session 2 (26:36 long) Sustained and unacknowledged bid

12:11	1	TA	oh this one says (1.0) [↑who keeps walking over me (.) hiss:ed the snake reading from the book.....
	2		(0.2)
	3	TA	turns book to pupils
→	4	C4	hand up
	5	TA	o::[h have a look what can we ↓see in the pic.ture looking down at picture
→		C4	continued hand up.....
	6	TA	that gives us a clue[: about <u>who it might be</u>

→		C4	<i>continued hand up</i>
	7	C1	[monkey:: [pointing at the monkey
→		C4	<i>continued hand up</i>
	8	TA	but what can we ↓see Sally <i>looks up at C4</i>
→		C4	<i>continued hand up</i>
	9	C4	the monk [ey I saw something
		TA[looks down at book
	10	TA	yeah we can see the monkey but what can we <u>see</u>

In line 1 the TA reads from the book. The script next instructs the TA to read aloud the statement which would give the pupils additional contextual information (such as the event happened whilst the snake was asleep and it therefore would not know who did it), and draw their attention to a specific aspect of the picture (the footprints). The scripted question ‘How do you know who did this?’ would therefore be designed with the intention of the pupils linking the footprints with the monkey.

The TA turns the book around and then begins another turn by drawing the pupils’ attention to the picture. It can be shown that pupil C4 has heard line 1 as a complete TCU, a question; whereas the TA has not heard line 1 as a possible question, but instead as a statement of information, in preparation for a follow up question (in lines 5 and 6). The TA therefore continues the turn, with the pause giving the opportunity for the pupils to look at the picture (the ‘o:h’ whilst looking down signalling that the picture is the focus).

Pupil C4 has had her hand up since the turn following the TA’s opening TCU and the book being turned round (line 4). When her bid for a turn is accepted by the TA in line 8, she then in line 9 gives an answer to the question she had originally bid to answer: ‘who keeps walking over me’ (‘the monkey’). However, in the intervening period C1 has provided an answer which has led to the initiation of a repair sequence. C4 repeats the answer given by pupil C1 in line 7 and does not therefore take into account the additional information given by the TA in line 6 or the indications for the need for repair given by the TA in line 8. From the point that C4 bids for a turn her hand remains up until the bid is accepted; the activity that the TA is now orienting to has not been oriented to by pupil C4.

4.5 Summary of results

It has been shown that there are two ways in which turn taking is oriented to by participants:

- 1) As an overarching organisational principle in relation to the task (or activity type) being undertaken.
- 2) As a way of organising sequences of talk between participants on a turn by turn basis during the task (for example, to repair troubles or scaffold learning).

It has also been shown that these practices:

- Demonstrate a strong orientation by the TA to the organisation of the activity;
- Prevent pupils other than the individual whose turn it is from orienting to learning points;
- Can create interactional and learning troubles.

The ways in which this occurs will now be summarised in relation to the organisational practices identified.

4.5.1 Sequential turn selection

Sequential turn selection was found to be in use during games; ‘reading round’; and oral discussion. TAs use various interactional devices to signal whose turn it is, and to reinforce turn taking rules. There is also evidence that the TA and the pupil whose turn it is are engaged in one to one interactional sequences; that pupils fail to orient to the learning points which these interactions contain; and that TAs work to prevent others joining the interaction. Other pupils are therefore not taking an active part in the interaction, and the pupil whose turn it is does not have access to peer support. It was also found that sequential turn selection is associated with questions with multiple candidate answers and the use of this organisational device for questions with one correct answer can cause troubles to occur.

4.5.2 Turn bidding by pupil raising hand

It was shown that when pupils engage in sustained turn bidding in response to an undirected question, if this remains unacknowledged by the TA, they fail to orient to the turns of other participants during this time. The pupil remains oriented to the point in the interaction at which the bid occurred; therefore if selected at a later point to contribute, the contribution is pragmatically inappropriate.

Chapter 5 Results: Repair strategies - Other Initiated Repair

5.1 Introduction

In this chapter talk-in-interaction during literacy intervention sessions will be explored using CA as an analytical framework, in order to answer the research questions:

- What repair practices are used by teaching assistants (TAs) and pupils when troubles arise during literacy tasks?
- What are the implications of these repair practices for the moment-by-moment learning experience of pupils?

As yet the processes entailed in initiating and achieving repair in relation to TA led literacy intervention sessions are unexplored; it cannot be presumed that the repair strategies in use by TAs and pupils are the same as those in use in mundane conversation; by teachers and pupils; or by TAs and pupils during in class activities. Therefore, repair devices found in the empirical data will be explored in an inductive way. The findings will be discussed in terms of beginning to build theory in relation to the use of OIR (what devices are found to be in use and any relationships between these and the successful completion of SR) and the implications of this for policy and practice will be briefly outlined. Where appropriate, links will be made to literature. Of particular interest in this respect are studies where the interactions between adults and pupils are examined using CA as an approach in mainstream classrooms (Radford, Blatchford and Webster, 2011) and in the support of pupils with SSLD (Radford, 2009; Radford, 2010a; Radford, 2010b).

5.2 Overview of results

It is apparent in the data that repair is typically initiated by an ‘other’ than the pupil themselves, and that this other is almost always the TA rather than another pupil. The data includes question-with-known-answer sequences, or activities which have a ‘correct’ response (for example, reading aloud) and it is these which are focused on in this chapter. Perhaps because of the nature of the interactions, the majority of RIs

would be classed as specific repair initiators (Radford, 2010b) in that they locate the trouble more specifically than a general initiator which offers no support in locating the trouble or establishing what type of trouble it is (hearing, understanding or 'correctness'). Whereas it has been shown that there is a preference in mundane conversation for addressing problems first as a hearing problem rather than a correctness or acceptability one (Svennegig, 2008), in order to avoid a 'face threatening act' (p. 344), this did not occur in these data. The 'problem' of the trouble is therefore firmly placed with the pupil. It is also notable that the repair strategies used provide high levels of support by the adult, rather than being focused on developing independence; closed questions or very high levels of prompting are used to initiate repair or elicit corrections from other group members. It is argued that this is liable to lead to high levels of dependency on adult support. This supports the findings of Radford, Blatchford and Webster (2011) in relation to TAs working with pupils in whole class mathematics sessions which found that they 'close down' students linguistically and cognitively. The data also suggests that initiating others to self repair is not a device in use by pupils in key stages 1 and 2 (at least in relation to participation in TA led group activities), extending findings in relation to early years (Forrester and Cherington, 2009). However, pupils become easily engaged in providing corrections for other pupils during repair sequences.

In relation to repair it will be shown that:

- Different initiation and support practices are in use, and differ in the extent to which they prompt self repair;
- There is a strong tendency for high level support practices and correction;
- The repair devices used suggest a focus on task completion.

As there is a strong tendency across the data for correction to be used by TAs, the use of correction - when a repair is initiated and correction provided by a participant other than the one whose turn contains the trouble source – is therefore analysed in some detail. Although the number of instances are less important than the qualitative details of the talk-in-interaction involved, it might help the reader to contextualise the data to know that there were 193 instances of correction by a TA across the data set, and that these

mainly occurred when a pupil was involved in reading or spelling a single word or short sentence. Almost half of all repair sequences end with a direct correction. However, there may be the opportunity first for either SR by the pupil or OR by another pupil before correction is used. In these cases corrections follow at least one incorrect alternative response given by the pupil when prompted to repair, or an incorrect alternative response provided by another pupil. Repeated troubles may be responded to with correction if another strategy has previously been used with that or another pupil.

In relation to correction it will be shown that:

- Correction is a strategy commonly used by TAs;
- Learning troubles can remain unresolved because of the focus on the task rather than the repair;
- Overlapping speech can be problematic in this respect.

An overview of the data in relation to repair can be found in the following tables (4-7). These show how often the practices presented occurred in the data. Where data has not been provided for phenomena, this is because they are unique; they show a practice rather than suggesting it is general.

Table 4: Repair initiation devices: overview of data

	Number of instances of response stated as incorrect with				Number of instances repetition	Number of queries of previous response	
	candidate answers further limited	explanation of why answer does not match response	explanation of why the response is incorrect	self repair	followed by self repair	followed by prompt	followed by peer other repair
Case 1	2	3	1	1	0	2	1
Case 2	0	0	0	1	3	1	2
Case 3	1	2	1	0	0	1	1
Case 4	0	2	1	0	0	0	0
Case 5	6	17	6	1	4	10	1
Case 6	7	13	4	4	1	2	2
Case 7	9	12	4	0	1	2	2
Case 8	2	7	3	5	0	1	0

Table 5: Repair devices: overview of data

	Number of instances of relating trouble to previous learning		Number of instances of prompted completion		
	Relating trouble to earlier interaction	Relating trouble to previous interaction	Repetition alone prompts self repair	Repetition with addition of prompts	Part repetition and correction
Case 1	1	1	0	11	4
Case 2	0	1	0	0	0
Case 3	1	3	2	1	1
Case 4	0	0	0	0	0
Case 5	1	2	1	1	8
Case 6	0	0	10	9	5
Case 7	0	2	2	0	2
Case 8	4	2	2	0	3

In the following table N/A has been inserted where no reading activities occurred.

Table 6: Activity specific prompts: overview of data

	Number of prompts to sound out	Number of prompts to draw on meaning	Number of prompts to use picture clue	Number of uses of gesture as a prompt
Case 1	10	3	1	2
Case 2	N/A	0	1	0
Case 3	4	0	2	0
Case 4	N/A	0	1	0
Case 5	9	4	0	5
Case 6	6	3	0	8
Case 7	4	1	0	3
Case 8	2	1	0	5

Table 7: Correction (other initiated other repair): overview of data

	Total number of corrections by a TA	Number of OISR attempts followed by correction	Number of corrections of words previously repaired with another pupil	Number of attempted OIORs by pupil followed by correction	Number of corrections with overlapping repeat
Case 1	12	5	0	0	0
Case 2	9	2	0	1	2
Case 3	14	0	1	0	1
Case 4	6	0	0	0	2
Case 5	59	7	3	4	5
Case 6	46	7	3	3	2
Case 7	29	5	0	7	2
Case 8	18	5	1	2	1

5.3 Repair initiation devices

This section will examine repair initiation devices which have found to be in use across all activity types. It will be shown that the turn which exposes the trouble can be formed by:

- Explicitly indicating the response as incorrect; or
- Implicit indications of incorrectness (repeating the turn with rising intonation, or querying the previous turn).

Either of these devices may be followed by a prompt or hint, whether as a separate TCU within the same turn, or as a later turn. Alternatively a hint or prompt may be produced without either of the above. In this case these themselves operate as the exposure of the trouble source.

5.3.1 Stating the response as incorrect

Where the response is stated as incorrect, this is done with the use of the word ‘no’; with a shake of the head; or with the use of both ‘no’ and a shake of the head. This may be followed by the word ‘not’ and repetition of the incorrect response. Alternatively, the use of ‘not’ and the repetition of the response can stand alone without the use of the initial ‘no’. These actions are often combined with other repair devices such as the provision of additional information. However, there are some instances when the indication alone can successfully operate as a repair initiator (see table 4, page 118).

Found following responses to undirected questions during whole group activities (for example, in response to choral responses), an indication that a response is incorrect may be used when a limited number of candidate answers have been made available to select from (or there is only one correct answer). The indication that a candidate answer is incorrect reduces the number of available candidates further, thus operating as support for repair. An indication that a response is incorrect can lead to repair by a member of the group other than the pupil who gave the original response or by the group as a whole (a choral repair). The following extract demonstrates the use of an undirected question with the provision of a limited number of candidate answers from which to select (in

this case two). The choral response is followed by the indication of an incorrect response, followed by repair by an individual.

This is a shared writing activity, to produce a reply to a letter that the group has received from the fictional character Pippa. The TA is recording the letter on the whiteboard.

The sentence under construction is the final one of the letter. So far the TA has written ‘from’ and the names of all of the pupils in the group except one.

Extract 8 from case study 8 session 3 (21:08 long) Further limiting candidate answers

12:11	1	C1	and Arran
→	2	TA	a::nd what do I put in comma or and what do I put in? <i>facing away from group writing on whiteboard</i>
	3	Grp	[comma
		TA	<i>[turns round from board</i>
	4	Grp	°°comma°°
→	5	TA	no I said (its making) <i>turning back to whiteboard</i>
	6	C3	[(inaudible)
		TA	<i>[turns round to face C3</i>
→	7	C2	and
	8	TA	and

The question in line 2 is an undirected one and offers two candidate answers for the group to select from (‘comma or and’), a high level support strategy found to be uncommon in reading activities in preschool classrooms (Pentimonti and Justice, 2010) but commonly in use across in a range of literacy activities (at both key stage 1 and 2) in the present study. A choral response in line 3, and more quietly in line 4 of ‘comma’ (the change from the beginning of the word ‘and’ to the question ‘what do I put in comma or and?’ could be argued as the prompt for the selection of the other candidate answer by the group) is followed by indication by the TA that this is incorrect both non verbally in line 3 (through the TA turning away from the board) and verbally in line 5 (the word ‘no’, combined with the beginning of an additional repair support ‘I said’). The other candidate answer (‘and’) is then put forward by C2 in line 7; this is repeated by the TA and written onto the board. Although the repair is provided by an individual, it is accepted as a repair of the choral response given. The interaction only provides evidence that C2 is engaged with the repair however, indicating that the focus is on task completion rather than taking up the learning opportunity for the group.

The explicit indication that a response is incorrect can also be combined with information about why the response is incorrect. This can be achieved in two ways:

- Stating why the answer required does not match the response given;
- Stating why the response given is not an answer.

The following extract provides an example of the repeat of the incorrect answer, followed by an action focused on the answer being sought, which indicates why it does not match the response given by a pupil.

The group are reading the book ‘The washing day’ chorally. The sentence being read is ‘Time for all the dirty clothes.’

Extract 9 from case 4 session 1 (23:12 long) Explanation of why an answer does not match

19:50	1	TA	now with your pointy fingers (.) ok we’re going to read together
	2		t[ime (.) for (.) all (.) the (.) dirty (.) clothes so
		Grp	[ime (.) for (.) all (.) the °°(inaudible) [clothes °°
		C4	[washing
→	3	TA	not washing it begins with a cl so its (.) [clothes
		Grp	[clothes
		C2	[clothing

In line two the choral reading breaks down at the word ‘dirty’, which is read by the TA in the same way as the previous words, but is not articulated clearly by any pupil (there are a range of unclear utterances at this point, which are quieter than the preceding words, suggesting that the group as a whole is having significant difficulties reading this word). There is no repair initiation at this point by the TA – but after the word ‘washing’ is said instead of ‘clothes’ by C4, a repair is initiated (line 3). This is itself an interesting point – it would seem that repair is initiated during choral reading activities if a clear and audible incorrect response is given, but not if an unclear response is given.

The repair initiation is formed by an explicit statement that the response is incorrect (‘not washing’), followed by a hint in relation to the candidate answer (‘it begins with a cl’) and the opportunity for repair (‘so its (.)’ – with the pause after its providing the opportunity for the repair to be completed), which the group does chorally in line 3. It is interesting to note however that the response of C2 (‘clothing’) does not match that of

the other pupils in the group, or the TA ('clothes'). This is not taken up by the TA as an opportunity for repair. There are two possibilities here. Either the focus of the TA when monitoring choral responses is on the initial phonemes (with the endings of words being less prone to be picked up for repair), or the focus for the monitoring of repair is on the pupil whose response initiated the repair. In either case it supports the argument that choral reading tasks continue unless a response is significantly phonetically different to that which appears on the page; unclear, inaudible or 'close enough' utterances are glossed over and the task progresses.

The other strategy for indicating that a trouble needs to be repaired is to indicate why the response given is not the answer. The following extract provides an example of the repeat of the incorrect answer, followed by an explanation of why the response given is not the answer.

The group have been asked to state the possible spellings for the sound /o/ They have given 'oa' and 'o' so far.

Extract 10 from case 5 session 2 (54:09 long) Explanation of why an answer is incorrect

06:55	1	TA	something thats on the end of our[feet our little pinkies <i>wriggling fingers on right hand and looking at C5</i>
		C4	[.h.h tow
	2	C5	toe
	3	TA	T O:
	4	C4	O W
→	5	TA	n[ot O W thats [when our car: breaks dow[n <i>shakes head, continues looking at C5.....</i>
		C4	<i>[hand up</i>
		C3	<i>[hand up</i>
		C2	<i>[hand up</i>
→	6	C4	O E
	7	TA	O E: thats ri:ght

The response given by C5 in line 3 ('toe') follows the hint in line 1 ('something thats on the end of our feet our little pinkies'). A DIU to prompt C5 to identify the spelling of the /o/ sound then follows in line 3 ('T O:'). Following the response 'O W' in line 4, in line 5 the TA indicates that this is not the answer being sought both verbally ('not O W') and through a shake of the head. However, the response 'O W' (line 5) is *a* spelling of the phoneme, although not the spelling associated with the question in line 1. The indication that this response requires repair therefore includes recognition that 'ow'

is a correct spelling but not the one being sought ; ‘thats when our car: breaks down’ relates to the word ‘tow’, which has been used over the previous sessions to demonstrate/remember the ‘ow’ spelling in the same way that ‘toe’ has been used for ‘oe’. C4 is then given the opportunity to self repair in line 6 (‘O E’), the TA having maintained her gaze in his direction throughout line 5. Interestingly, the word ‘not’ in itself prompts the bid for repair by C4; this is followed by C3, and then C2 who bids after the explanation is given of why the response is not correct. It is argued therefore that the adding of this information by the TA provides additional processing time for the other pupils in the group and therefore results in a greater number of bids for repair. This action, whilst slowing the completion of the task down, may be significant in relation to supporting the involvement of all individuals in repair opportunities.

Where pupils are not selecting from given candidate answers, it is rare for the word ‘no’ to be used by the TA to an individual pupil and for it to lead directly to a self repair by that pupil. However, there are three examples in the data, when pupils are engaged in activities where bidding for an opportunity to provide a correction is involved (for example, when spelling words aloud). In these cases any self repair attempt needs to be completed before the TA selects another pupil to respond and provide an alternative. This can be seen in the following example.

The group are spelling words aloud. The word being attempted is *maiden*.

Extract 11 from case study 6 session 3 (44:11 long) ‘No’ as a follow up to a response

08:41	1	C2	m
	2	TA	<i>small nod</i>
	3	C2	a
	4	TA	<i>small nod</i>
	5	C2	d
→	6	C1	·h[hh <i>hand up</i>
		TA	[no <i>turns head to CA=</i>
→	7	C2	=i i
	8	TA	mm
			<i>nods</i>

It can be argued that the indication that the letter ‘d’ is incorrect as the next letter in the word is provided by the lack of a nod by the TA following the response in line 4 (this has been used as an action to indicate the correctness and therefore that C2 should continue in lines 2 and 4). This would potentially allow a space for self correction to

occur (the lack of positive response indicating the need for repair). However, the intake of breath by C1 in line 6 provides a stronger indication of the need to repair and indicates the intention to bid for a turn to repair, and this is then taken up by the TA stating that the response is incorrect (the 'no' overlapping with later part of the intake of breath in line 6). The bid to repair the response is completed by C1 putting his hand up, overlapped by the TA turning her head towards him indicating that he will be selected to provide the repair (line 6). However, in line 7 a self repair by C2 occurs ('i i'), the latching to the previous turns and the repair 'i' being repeated in order to maintain the turn at completing the task (spelling the whole word). This is accepted as correct by the TA in line 8 (with 'mm' accompanied by a nod). The turn at the task of spelling out the word then remains with C2, the self repair having been successful. This sequence shows a task focus by both TA and the pupils. When a repair is required other pupils in the group bid for turns and are likely to be selected unless a self repair is swiftly undertaken; it leads to a 'race to repair'. This would appear to be underpinned by a focus on task completion, and a pedagogical view of spelling as a recall task.

5.3.2 Other indications of incorrectness

Although the examples so far have been of explicit statements by the TA that a response is not the correct answer, a number of techniques have been found in the data for identifying a trouble source, without it being stated as being incorrect. Although the repair is an exposed repair, in that the ongoing talk is suspended whilst the trouble is dealt with (Jefferson, 1987), the exposure of the trouble source can be done in a way that potentially gives more control to the pupil in relation to identifying that there is a trouble source and what the trouble is. Two of these strategies are now explored:

- The TA repeats the turn with a rising intonation at end;
- The TA queries the turn of a pupil.

5.3.3 The TA repeats the turn with a rising intonation at end

Repetition of the whole of the pupil's turn by the TA with a rising intonation can perform the action of indicating to the pupil that their response is in need of repair. It can be considered as an example of a non-specific (general) repair initiator (Radford, 2010b) as it requires the pupil to locate the exact source of the trouble for themselves. However, in these data the form differs significantly from those found by Radford

(2010b), where non-specific initiators were found in forms which indicated significant lack of understanding or hearing of the previous turn ('pardon?' for example). Repetition of parts of the previous turn were found by Radford, but operating as checking for confirmation rather than indications of the need for repair. In the following cases the whole of the previous turn is repeated without changes, and is taken up as an indication that the complete response has been heard but requires revision. It is significant that this action occurs in the data only in relation to questions where there is one candidate answer. The following example is of the repair of the name of the person in the story the group have been reading.

The group are reviewing the story they have been reading together from the previous session.

Extract 12 from case study 6 session 1 (48:52 long)
prompts self repair

Repetition of previous turn

44:22	1	C1	because er:: zoe drunk the water
→	2	C2	zoe?
→	3	TA	zowee drunk the water?
→	4	C1	zach

The repair is first initiated by C2 in line 2, who repeats the part of the response which is the trouble source, with a raising intonation ('zoe?'). However, it is following the repetition of the whole of C1's response by the TA, again with a raising intonation in line 3 ('zowee drunk the water?'), although with a change from zoe to zowee (who is a character in the story with the name most similar to zoe)) that the self repair is made: 'zach' (line 4). The latching between the TA's turn in line 3 and the self repair by C1 in line 4, suggests that the trouble was a straightforward error rather than a more complex trouble which might require other support for repair.

Similarly, the following example shows the action of repeating the pupil's response with rising intonation, this time in relation to a word which has been spelt aloud (there is a single letter 'a' missing).

Extract 13 from case study 6 session 2 (51:30 long)
prompts self repair

Repetition of previous turn

37:37	1	C5	a w y
→	2	TA	a w y? =
→	3	C5	=a w a y

In line 2 the TA repeats the whole of the previous turn of C5 in line 1, but with rising intonation on the final letter ('a w y?'). A self repair then occurs in line 3 ('a w a y'). The latching between line 2 and the self repair in line 3 indicates that there is not a significant difficulty for the pupil in spelling the word. This strategy of repeating the whole of the pupil's previous turn as a prompt for repair can be successful in leading to self repair, and is therefore a useful practice that fosters independence. It should be noted that it was only found to be used in situations where the candidate answer appears to be easily available to the pupil without the need for support, demonstrating that TAs are able to make these kinds of subtle judgements in the moment.

5.3.4 The TA queries the previous turn

Querying the previous turn is taken up as an indication that the previous turn is a source of trouble. From examining examples from across the data set it can be concluded that it leads to either:

- A 'no' response from the pupil (or other indication that the pupil acknowledges that the response requires repair), which then leads to additional repair prompts from the TA (it is rare for a pupil to self repair without additional prompts); or
- A repair by another pupil.

The following extract shows the use of the query of the previous response, with an additional prompt then used to support the self repair.

The group are writing 'oa' or 'oe' depending on the word that is read by the TA.

Extract 14 from case 5 session 1 (46:32 long) Query of previous turn followed by prompt

10:20

1	TA	now does that look right Martin (.) do you think that looks right?
2	C2	<i> rubs out letters on board</i>
3	TA	so if its not that one its got to be the <u>other</u> one [isnt it the o: yeah thats it
	C2	<i>[writes letter on board]</i>

The TA in line 1 initiates a repair with 'Does that look right Martin (.) do you think that looks right?' Rather than responding verbally, C2 rubs out what he has written on the

whiteboard – this suggests that a query of this kind is taken up as an indication of an incorrect response.

Line 3 acknowledges that the pupil has been correct in rubbing out the letters he had written ('so if its not that one') and then supports self repair by prompting the pupil to recall the other grapheme for /o/ which the group have been using ('its got to be the other one'). This is sufficient to lead to self repair by C2 who produces the correct grapheme. It can be argued from the data that the initiation of repair in this format therefore operates to expose the need for repair, and have this acknowledged by the pupil, rather than in itself directly leading to self repair.

When queries of a previous turn occur during a choral or multi-pupil response they operate in a different way. Rather than signalling the beginning of a supported self repair sequence, they open the floor for a repair by any member of the group. In this way both the trouble and the repair are treated as group activities, depersonalising the trouble. The following extract shows an example of the breaking of this interactional norm, which is made explicit:

The group are composing a letter together. The sentence that has been written is 'Will you be my penfriend'.

Extract 15 from case 7 session 3 (31:27 long)
peer OR

Query of previous turn followed by

28:29	1	C3	ah full stop	
	2	C1	full sto::p	
→	3	TA	is it a full stop?	
			<i>looking at C1</i>	
→	4	C5	qu[estion mark	
→	5	C1	[no it was them what [said	
			<i>[pointing</i>	
	6	TA		[question mark well done

The responses in line 1 and 2 ('ah full stop' and 'full sto::p') are in response to an undirected question from the TA as to what should go at the end of the sentence. The response query in line 3 ('is it a full stop?') is directed at C1 (as the TA is looking directly at him), perhaps because of the elongated 'o::' in his response. The repair however is provided by C5 ('question mark'). Interestingly the turn of C1 in line 5 indicates his unwillingness to accept sole responsibility for the turn requiring repair ('no

it was them what said' whilst pointing at other members of the group). This would support the theory that queries of previous turns requiring repair which are choral or multi-person tend to be depersonalised, undirected, and open to repair by any member(s) of the group. There are links here with the suggestion by Ridley, Radford and Mahon (2002) that teachers (and in this case TAs) need to balance the need to not damage the confidence of the pupil through the use of rejection formats when initiating repair whilst ensuring that support is provided.

5.4 Repair devices

A range of specific devices used in repair sequences which have been noted in the data are now discussed.

5.4.1 Relating trouble to previous learning

There are times when the TA relates the current source of trouble to previous learning during the session. The following example shows the TA drawing on a previous discussion about the book.

The group are taking it in turns to read a page of the book 'The computer game'. The word requiring repair is *sandwich*.

Extract 16 from case 3 session 1 (37:58) Relating trouble to earlier interaction

30:50		
1	C3	the (1.5)
2	TA	<i>points to picture</i>
3	C3	bread
4	TA	not bread [what did we say he's making [<i>points at word then back at picture</i>
5	C3	[sandwich
6	TA	well done he's making the sandwich lets turn the page

Referring the pupil to the picture clue given by the TA in line 2 (pointing at the picture of the sandwich) results in the pupil in line 3 giving a plausible candidate answer which describes what can be seen ('bread'). This is rejected by the TA in line 4 ('not bread') and an additional hint is then provided (whilst continuing to refer the pupil back to the picture clue with her finger) which refers the pupil to previous discussion about the pictures before the book was read ('what did we say he's making'). This results in C3's

self repair of ‘bread’ to ‘sandwich’ in line 5. Interestingly the self repair occurs before the TA completes her turn; the hint ‘what did we say he’ is sufficient to trigger the recall needed to complete the repair. In this sense it is a helpful practice in that it the pupil has to do the job of retrieval alone; it is therefore a practice which fosters independence. This practice can also relate the trouble source to learning in previous sessions. In the following extract the TA reminds the pupil of a digraph covered in previous sessions, providing an example.

The group are writing the graphemes for common digraphs. The digraph which has been asked for is /sh/.

Extract 17 from case 1 session 1 (40:22 long) Relating trouble to previous interaction

02:34	1	C1	<i>sighs</i>
→	2	TA	come on Jessica you remember sh::
	3	C1	I remember but
→	4	TA	sh::op what comes first two letters
	5	C1	s h
	6	TA	good girl s h

The TA in line 2 provides a hint which encourages the pupil to draw on previous learning – in line 3 C1 acknowledges that she has come across the digraph before. However, this is not sufficient for her to recall the grapheme (indicated by the ‘but’ in line 3) and the TA therefore provides an example of a word containing the digraph which has been used in previous sessions, continuing to emphasise the digraph being focused on by extending the sound before completing the word (‘sh::op’) and then providing the additional prompts ‘what comes first two letters’. This results in C1 self repairing in line 5 (‘s h’). Clearly this practice relies on the TA knowing the pupil well in order to pitch the hint contingently and avoid early correction.

These data suggest that drawing on learning covered during that session is more successful than drawing on that from previous sessions.

5.4.2 Repeating the correct part of the turn so far (prompted completion)

When using this prompt, the TA repeats the whole turn up to the point at which the trouble occurred (when reading this is often accompanied by pointing at the next part of word or the next word in the sentence). This indicates to the pupil that the previous turn

requires repair and provides a lead in to a self repair by the pupil. The following extract demonstrates the use of repetition as a prompt for self repair.

The TA is asking the group questions about the book they are reading ‘The computer game’.

Extract 18 from case 3 session 1 (37:58 long) Repetition as a prompt for SR

34:20	1	TA	::h what d’you think pete is telling his grandma about what d’you think pete is telling (.) grandma about?
	2	C3	computer
→	3	TA	his computer or a computer::?
→	4	C3	game
	5	TA	↓game his computer game

A repair is initiated by the TA in line 3 in relation to the response ‘computer’ (line 2). The candidate answer is not correct (in that it is the computer game not the computer that is the required answer). However, the response is close lexically to the required answer; the repetition of the response (with the additional ‘his’) given by the pupil, with the elongated r:: and rising intonation at the end (‘his computer or a computer::?’) indicates that there is an additional word which needs to be added to make the response complete. This lead in is used by C3, who completes the noun phrase with the word ‘game’ in line 4. The self repair is then reinforced by the TA in line 5 who acknowledges the corrective addition (‘game’) and then repeats the whole phrase (‘his computer game’). This is similar to the use of prompted completion found by Radford (2010a) to be in use by adults working with pupils with SSLD.

If this does not lead to self repair, the TA then has the option of continuing their turn, providing additional support for self repair in the form of phonetic prompts and/or a correction. In the following extract the initial phoneme (which is correct) is repeated as a prompt, and additional prompts occur in the form of the phoneme(s) already provided with an additional one added each time.

The pupils are reading a group of compound words from a list. The word being attempted is *goalpost*.

Extract 19 from case study 6 session 2 (51:30 long) Repetition and addition of prompts

32:50	1	TA	right Priya can do this one for me <i>points at word</i>
→	2	C1	glowpost
→	3	TA	not glow: what[s g
	4	C1	[gl um g l
→	5	TA	goa
	6	C1	go
	7	TA	goal post

In this extract the word goalpost is read as 'glowpost' by C1 in line 2. The second syllable of the word is correct ('post') - the TA highlights the first syllable as incorrect in line 3 ('not glow') and provides a prompt (in the form of providing the first phoneme, 'g') for the pupil to reread the first syllable. This prompt is overlapped by the pupil's self repair attempt which at first repeats the incorrect start of the syllable 'gl' but then incorporates the prompt provided by the TA by using the initial phoneme 'g'. However, this fails to produce a self correction as it is followed by the phoneme 'l', therefore repeating the same error but splitting it into the two separate phonemes (g/l) rather than the blended gl. The TA then provides a prompt in line 5 which gives the first two phonemes 'goa' (g/oa). When the following repair attempt by C1 in line 5 also fails ('go') the TA provides the first three phonemes; this also completes the syllable (the word goal), which is demonstrated by the use of emphasis on the 'l' and the addition of the second syllable 'post' to complete the whole word.

There is a similar strategy in that it involves repeating the correct section of the pupil's turn; however, it offers a much higher level of support by providing a correction of the next phoneme which was the trouble source. This is demonstrated in the following example.

The pupils are taking it in turns to spell a list of compound words that they worked on during the previous session. The word concerned is *milkshake*.

Extract 20 from case study 6 session 3 (44:11 long) Part repetition and correction

07:43	1	TA	can you remember the next one?
	2	C3	milkvan?
→	3	TA	<i>looks down at list then up at pupil</i> close milksh:: [:
	4	C3	[milkshake

In line 2 the pupil responds to the request for the next word on the list with ‘milkvan’. The word is plausible as a candidate answer as it is a compound word and begins with ‘milk’ which is the beginning of a word on the list. That the word is plausible is confirmed by the action of the TA in checking down at the list of words and then saying ‘close’. She then repeats the first syllable ‘milk’, confirming that this section is correct, before providing the first phoneme of the second syllable, ‘sh::’, lengthening the sound until it is used by C3 to self repair by providing the word ‘milkshake’ in line 4. However, repetition of just the first part of the word (i.e. milk) would have prompted repair more independently, still offering the opportunity for further repair prompts if necessary.

It was found across the data that this strategy is used when the response is given by the pupil is one which is close to the response sought, and is plausible.

5.5 Activity specific prompts

There are some prompts which have been found to be specific to reading or spelling activities. These will now be explored.

5.5.1 Asking the pupil to sound the word out

Common in these data when trouble occurs with reading a word is the TA prompting the pupil to sound the word out. This may be a general prompt to sound it out (i.e. the whole word), or less often a specific prompt to sound just the initial letter out.

Difficulties can occur however when the word which is being attempted is not phonetically regular or the pupil sounds out each individual letter when digraphs (or split digraphs) are involved. The following extract demonstrates how difficulties arise when individual letters are sounded out when the word contains a split digraph.

The group is reading a page each of the book ‘The computer game’. The word being attempted is *here*.

Extract 21 from case 1 session 1 (40:22 long) Prompt to sound out

34:50	1	(7.0)	
	2	TA	sound it out Eamon turn round please
	3	C1	h e r e <i>looks at TA</i>
	4	TA	<i>nods</i> grandma:s
	5	C1	hair
	6	TA	here
	7	C1	here

Following the extended pause in line 1, indicating a trouble with the word *here*, the TA prompts C1 in line 2 to ‘sound it out’. In order to read the word correctly they would need to recognise the second and last letters as a split digraph (together forming a long sounding /e/ as the second phoneme). In line 3 C1 sounds each individual letter’s phoneme (h/e/r/e). The TA nods and repeats the previous word in the sentence, which acts as a prompt for the pupil to blend the letters together, which the pupil attempts to do in line 6 (‘hair’). This is directly corrected then by the TA to ‘here’ (line 6) and taken up by C1 in line 7 through repetition.

There are examples in the data of pupils being asked to ‘sound out’ words which are not phonetically regular, or reading digraphs or trigraphs as individual letters without correction. There is therefore an argument for training TAs to be much more selective in their use of this particular prompt; both because incorrect use can lead to further trouble and because over-reliance on one cue source is likely to lead to an insecure literacy system (Hobsbaum, Peters and Sylva, 1996). It also supports the findings of Radford, Blatchford and Webster (2011) that inappropriate support can be provided due to limited conceptual understanding by the TAs themselves.

5.5.2 Drawing on meaning (sense making)

This involves the TA repeating the previous turn (or part of the turn), questioning whether it makes sense. The following is an example of the reading and repair of a nonsense word.

The group are reading a passage containing words with the phoneme /o/ spelt in different ways. The sentence being read is ‘He croaked’.

Extract 22 from case 5 session 2 (54:09 long) Querying the sense of the previous turn

11:09	1	C5	he crocked <i>looks at TA</i>
→	2	TA	crocked do you think that makes sen[se n[o he croaked good
		C3	[hand up
		C5	[oh [croaked
		C3	[croaked

In line 2 the TA repeats the candidate answer (‘crocked’) and queries the sense of this (‘do you think that makes sense’). The TA begins a correction, but the repair is completed by

both C5 and C3 simultaneously, slightly ahead of the correction. This is acknowledged by the TA ('good'). This strategy leads much more often to self repair than the general strategy of querying the previous turn discussed earlier (with a response such as 'do you think that looks right'), which requires additional prompts or hints to complete the repair sequence.

A variation on this strategy which was very rare in the data (only two instances were contained) focuses on what *would* make sense. In this case the TA asks the pupil to read the remainder of the sentence, missing out the word causing difficulty, and then return to the word causing the trouble. This however relies on a relatively high level of comprehension of the text (of knowing what would make sense at that point in both the individual sentence and the text as a whole). In neither case found was this sufficient to support self repair in itself; additional repair strategies were used.

5.5.3 Picture clues as prompts

A prompt which is used infrequently in the data is where the pupil is directed to the pictures accompanying the story being read (there were only 5 examples found). However, it should be noted that only 6 (out of 25) of the sessions recorded involved the use of books with pictures. In the data collected, prompting by referring the pupil to the picture did not in itself lead to self repair in any of the cases in which it was used. The following shows an example of the picture being used as a first repair prompt, followed by other prompts when this does not lead to repair.

The group are taking it in turns to read a page each from a book. The word being attempted is *sandwiches*.

Extract 23 from case 1 session 1 (40:22 long) Failed picture clue prompt

30:00	1	C3	(3.0) looks at TA
→	2	TA	what are they making? look at the picture clue what are they making?
	3	(4.0)	
→	4	TA	what sounds it begin with Caroline?
	5	C3	s
	6	TA	s
	7	C3	a n d w i [ch
	8	TA	°° [chies °°
	9	C3	looks at TA
	10	TA	nods s an san

The pause in line 1 and the action of C3 of looking at the TA, indicates trouble with the word *sandwich*. The TA prompts C3 in line 2 with the question ‘what are they making?’ with a further prompt to ‘look at the picture clue’, indicating that the support for the repair is to be found in the picture rather than from remembered knowledge (which the question ‘what are they making?’ by itself could refer to). There is another extended pause in line 3, indicating that C3 is not able to attempt a self repair using the prompt provided. At this point there is a change of prompt, with the TA directing C3 to the initial letter phoneme (‘what sounds it begin with caroline?’). The use of a picture clue as a prompt did not in itself lead to self repair in any of the cases found. Comparing this with the earlier discussion of the strategy of drawing on previous knowledge, it would seem that the use of pictures as a basis for discussion **before** reading, and then drawing on this discussion supports repair more successfully than referring to picture clues **during** the reading only.

5.5.4 Use of gesture

The use of gesture was a strategy found in the data for prompting repair during spelling activities. It could be argued that the use of gesture in the form of the action of miming a word known by the pupil containing the sound being sought (which is the case here) provides a similar link to a picture clue in a reading book. In addition, the examples found in the data related to words which had been used across a series of sessions to illustrate the sound being focused on, so drew on previous experience. The following extract is an example of a mime being used by the TA which has been used across a series of sessions in relation to the phoneme /ow/ - doing up a bow tie.

The group are reviewing the previous day’s learning of the digraph /ow/.

Extract 24 from case study 6 session 1 (48:52 long) Use of gesture as a prompt

06:05	1	TA	so whats the sound?
	2	C2	<i>hand up</i>
	3	TA	whats the sound sarah of O W
	4	C2	O W ow
→	5	TA	<i>mimes the action of doing up a bow tie</i>
	6	C2	[o ow
		TA	[continues miming..
	7	TA	ow [yeah like b ow isnt it
		 [turns palms upwards then continues action

The trouble occurs in line 4 with C2 responding with a blend of /o/ and /w/ (as in owl) instead of the short phoneme (as in show). The TA in line 4 provides a prompt by miming the action of doing up a bow tie. Following an incorrect repair attempt in line 6 ('o', during which the TA continues the action) the trouble is then self repaired by C2 (line 6 – 'ow'), and the TA once again establishes the link between the phoneme /ow/ and the action by repeating the word (emphasising the phoneme by separating it from the initial phoneme /b/ in bow 'b ow') and the action together in line 7. This then serves to support the self repair in this instance, and to reinforce the use of the bow tie action as an aid to memory in relation to the spelling of that phoneme. Although found in use in these data in only two of the case studies (both with the same TA), there was evidence of this being consistent in successfully leading to self repair. Similar use of iconic gestures have been found by Radford (2010b) in the context of adult support of pupils with SLD and by Radford and Mahon (2010) in relation to adult support of deaf children.

5.6 Correction (Other Initiated Other Repair)

Correction (OIOR) as a repair device will now be explored. In the institutional talk-in-interaction of the teaching context, the strongest evidence that the OIOR has the potential to support the pupil's learning is provided through evidence of repetition or modified repetition which can show acceptance or rejection of the correction in a subsequent turn. 'Whether and how an utterance is modified when it is produced the second time is relevant for analyzing its action import' (Stivers, 2005, p. 131), therefore the next turn by a pupil following a correction is potentially crucial in monitoring their engagement with the correction (and therefore the learning). If the conversation moves on without any form of repetition in the following turn, and there is no opportunity in subsequent turns for this repair to be demonstrated as complete, there is no evidence that the pupil has oriented to the correction. Whereas the interactional trouble may have been repaired (therefore moving the interaction on), in an educational context this is not sufficient; there ideally needs to be evidence that the pupil has oriented to the learning point. Although verbal repetition is focused on here, it should be noted that there may be other indicators of orientation to the learning point (for example, gesture and gaze).

Therefore, successful OIOR in the form of exposed correction requires three key actions:

- Exposure of the trouble source;
- Provision of the correct alternative;
- (Ideally) repetition of the correct alternative.

This last action is key in relation to monitoring the engagement of the pupil with the learning experience, although it should be noted that it does not provide direct evidence that ‘learning’ has occurred (Nassaji, 2007). Evidence of repetition has been shown to be lacking in previous studies of repair between teachers and pupils with SLD (Ridley, Radford and Mahon, 2002).

OIORs in the form of exposed corrections are commonly found in the data set in literacy activities which involve individual pupils reading a single word or short sentence. There is always a correct alternative when troubles occur as pupils are involved in reading or spelling activities; this is in contrast to activities where there are multiple possible alternatives which would all be pragmatically correct.

Trouble sources located and corrections made by the TA relate to a word or section of a word which is misread. Exposed corrections require the object for repair to be openly identified; the correction then becoming the focus of the interaction. Where repetition of the correction (and therefore the completion of the repair sequence) occurs this is in the pupil’s turn following the provision of the correct alternative, and takes the form of the pupil repeating the alternative provided verbatim. The following is an example of a complete repair sequence involving exposure and correction of the trouble, and repetition of the correct alternative.

The pupils are taking turns to read a sentence each of a passage containing words with the phoneme ‘oa’ (short o sound). The sentence being read by pupil C5 is ‘*He moaned and groaned*’.

Extract 25 from case study 6 session 1 (48:52 long) Repetition of correction by pupil

9:59	→	1	C5	he moanded
		2	TA	not moanded we dont say moanded do we he ↓moaned <i>looking at pupil</i>
	→	3	C5	he moaned and growled

The beginning of the OIOR sequence in line 2 is clearly marked by the TA's 'not moanded', which includes the repetition of the pupil's incorrect reading of the word moaned as 'moanded' reinforced by 'we dont say moanded do we', thereby exposing the trouble source of the incorrectly pronounced ending of the word (an additional 'ed' has been added). There is the need for exposed rather than embedded correction, as the pupil's turn has to be interrupted in order for a correct alternative to be provided for the misread word. The alternative would be for the TA to wait until the end of the pupil's turn. However, this would be some time after the trouble source. There is no initiation by the adult of a self repair sequence, instead the correct alternative is provided by the TA in the same turn as the exposure of the trouble source ('he ↓moanded'), with the falling intonation indicating that it is a correction. The correct alternative is repeated by C5 in the next turn (in line 3 before continuing to read the sentence). This repetition in line 3 demonstrates that the repair is complete – the alternative has been heard and taken up by the pupil and the task continued. In repair sequences which involve the interruption of the TCU to provide a correction of a word, the corrected word may be repeated by the pupil who then continues reading; this is not inherent in the interactional structure of the task (the pupil could continue with their turn by reading on from the correction) but displays to all participants that the repair has been successfully oriented to.

5.7 Interaction points at which correction is used

Corrections occur immediately following the trouble source – in the turn following the completion of the pupil's turn (either embedded in the TA's next turn or as an exposed correction in the next turn) or before the end of the pupil's TCU (the turn is interrupted following the end of the word where the trouble source occurs).

Some specific uses of correction were found in the data in terms of when correction is used as opposed to other repair procedures (such as OISR). In the extract previously discussed correction was used as the first repair strategy, which was found to be the predominant pattern in the Radford, Blatchford and Webster (2011) study. In the present study this is less pronounced (see table 7, page 119). This may be because of

the out of classroom (i.e. away from the teacher) context, the subject (literacy rather than mathematics) or because of the types of tasks undertaken. However, there are numerous examples of correction used either as a first or second device (following a self or other repair attempt). The following extracts will demonstrate a recurring trouble (following previous incomplete or complete repair sequences, involving either the same pupil or another pupil) where correction is used. In each of these cases one previous attempt at repair has occurred and correction is the repair device next used. It can therefore be argued, as in Radford, Blatchford and Webster (2011) that corrections are readily supplied.

5.7.1 Incorrect self repair attempt followed by correction

There are occurrences in the data of correction following OISR attempts (see table 7, page 119). This is a potentially helpful sequential practice because it fosters independence by providing the pupil with the opportunity to work out the repair alone. However, this strategy becomes less helpful if corrections are provided as soon as one attempt fails rather than an extended repair sequence being developed. In the following example the TA provides a RI, but when the self repair fails the correct alternative is given.

The pupils are taking turns to read sentences they have composed. The sentence being read by pupil C1 is ‘*When I came to school today I forgot my book at home*’ (sic). The TA is running her pencil along the top of the words as they are read aloud.

Extract 26 from case study 3 session 1 (37:58 long) OISR attempt followed by correction

20:04	1	C1	came to school to day I forget
→	2	TA	for? <i>moves pencil back along the beginning of word</i>
	3	C1	f forget? <i>looks at TA</i>
→	4	TA	for↓ <u>got</u>
	5	C1	forgot

(pupil C1 continues to read the sentence)

The trouble source is the second syllable of the word ‘forgot’ which is read by C1 as the present tense ‘forget’ (line 1). A RI is provided by the TA in line 2; this combines the verbal repetition of the first syllable of the word together with the gesture of running her

pencil back along. Both her verbal turn and gesture acknowledge the correct syllable (repeating the ‘for’) and expose the source of the trouble (the second syllable). The self repair attempt fails (the word ‘forget’ is repeated); the look towards the TA by C1 in line 3 when reading the second syllable, together with the rising intonation at the end of the word suggests he is aware that this continues to be a trouble and invites the participation of the TA in the repair. Radford (2009) found this to be a device for inviting adult participation in word searches, and it appears in this data as a device for inviting correction by an adult. At this point the TA provides the correct alternative (line 4), stressing the /o/ and using falling intonation to indicate a correction. This correct alternative is taken up by C1 (line 5) and the task of reading the sentence continues. That the invitation to provide a correction is made by the pupil following a repair attempt is important, as it indicates a metacognitive awareness and ability to draw on other resources when self repair attempts fail.

5.7.2 Correction of word previously repaired with another pupil

Once a word has been the subject of an exposed repair with one pupil in the group, if the same word becomes a trouble source with another pupil an OIOR correction rather than RI is provided. The following extract illustrates this point.

The group is taking it in turns to read a word and then split it into the component elements (core word and prefix or suffix). The word being read is *hostess*. This word has previously been read incorrectly by another pupil (shown for context in lines 1-5) and an exposed repair sequence completed. The extract under discussion (lines 6 to 10) occurs 171 seconds after the previous repair, during the same task.

Extract 27 from case study 5 session 3 (47:15 long) Repair sequence followed by correction

25:17	1	TA	Ryaaan
	2	C4	hostees <i>looks at TA</i>
	3	TA	hoste?
	4	C4	hostees <i>looks at TA</i>
	5	TA	hostess

(171 seconds of continued interaction)

28:15	6	TA	right what one are you on Simon?
→	7	C1	hostee
→	8	TA	hostess
	9	C1	hostess

The trouble occurs for C1 in line 7, with the same word that had previously required correction with another pupil, C4 – hostess. In this instance it is read with a short o sound and a long /e/ sound (the previous trouble for C4 in line 2 being the use of the long /e/ sound). In the previous repair sequence (lines 2-5) the TA has provided a correction specifically of the phoneme which was incorrect (/e/) and prompted the pupil to complete the word. In this extract, rather than providing a RI the TA provides a correction of the whole word in the next turn (line 8). This suggests that the repair sequence with the C4 in lines 2-5 is considered as the self repair attempt of the specific trouble source and therefore when the trouble recurs (even though this is with another pupil) correction is used as a first strategy. This presents an issue in that the repair point for the first and second pupil was different. Therefore the second pupil has not been given the opportunity to engage with an OISR opportunity which would develop his self supporting strategies. It could be argued however that it is not time effective for the TA to engage in one to one OISR sequences with every pupil. The opportunity could however be used to develop peer support strategies, or to use the word for a group teaching point.

5.7.3 Correction following incorrect alternative by another pupil

OIOR corrections by the TA also occur in the data following an attempted correction by another pupil. The following extract illustrates this pattern.

Pupils are self marking their spelling tests. The TA is selecting pupils to read their attempt to the group. The word being attempted is *disgrace*.

Extract 28 from case study 5 session 3 (47:15 long) Attempted OIOR by pupil followed by correction by TA

39:50 →1	C2	disgrace d i [c e]g (2.8)
	C4	[looks at TA]
	TA	[looks at C2]
2	C4	I can spell it
3	TA	sh
4	C2	r a c s s
5	TA	no very good <u>try</u> though [very good try.
6	C4	[oh miss hand up]
7	TA	does anybody know how to spell it? Ryan

→ 8	C4	d i s g r a s s
→ 9	TA	d i s g r a c e grace as in the girls name grace right if its wrong cross it out please

In line 1 the word is read correctly but is spelt out incorrectly. The attempt is displayed as in need of correction first by C4, who looks at the TA when the letter 's' is replaced by 'c' by C2 (the first trouble source in her attempted spelling of the word). The TA allows C2 to continue, refusing a bid for an OIOR attempt by C4 in line 2 ('I can spell it') with the sound 'shhh' in line 3. C2's turn is completed with the incorrect replacing of 'ce' with 'css'. The use of 'no' (line 5) by the TA indicates the need for repair, with the use of 'very good try' indicating to C4 at least that C2 will not be given a RI by the TA (he bids for a turn to repair in line 6 both verbally ('oh miss') and non verbally (raises his hand). His prediction is correct, with his bid overlapping with the beginning of the TA's next TCU – the initiation of a repair by requesting an alternative from another pupil with 'does anybody know how to spell it'. C2 is selected to provide the repair, but provides only a partial repair in line 8 (the first 's' corrects the previous 'c' provided by C2 but the end of the word remains incorrect with a 'ss' instead of 'ce'). Instead of an RI being offered to this pupil, or another alternative being sought, his incorrect alternative is then corrected by the TA in line 9. Multiple examples were found in the data which provide evidence that no more than one alternative is sought before the correction is provided by the TA. This suggests a focus by the TA on moving forward with the task rather than developing extended repair sequences.

5.8 Repetition of corrections

Repetition of a correction by the pupil which occurs in the next turn and takes the form of unmodified repetition of the correction can overlap or be overlapped by the TA in order to move the task on. Or the repetition may not occur but the task is moved on. In this case the possible outcomes are:

- 1) The pupil orients to the repair (the repetition is correct).
- 2) The pupil does not orient to the repair (the repetition is incorrect).
- 3) There is no evidence of whether the pupil has oriented to the repair (there is no repetition).

5.8.1 Correction and continuation: moving the task on

One notable pattern in the data is that the repair sequences which involve corrections by the TA do not always allow for a complete turn by the pupil which allows them to display their orientation to the correct alternative. This is because the interaction is moved on by the TA before a repetition turn is complete (or sometimes started), suggesting a focus on the completion of the task in line with the findings by Radford, Blatchford and Webster (2011). This section will explore examples of these incomplete or missing repetition turns.

5.8.2 Continuation of turn, with overlapping repeat

The following extract shows pronunciation being corrected in the form of the repetition by the TA of the whole word read by the pupil. Following the correction the TA continues with her turn, overlapping with the pupil's repetition turn.

The group is taking it in turns to read a word and then split it into the component elements (core word and prefix or suffix). The word being read is *mistrust*.

Extract 29 from case study 5 session 3 (47:15 long) Correction and turn continued by TA

25:50	1	C5	mmm mistrus	
			<i>looks at word</i>	
→	2	TA	↓mistrust [so break it make it mis and trust	
			<i>nodding</i>	<i>turns head to next pupil</i>
→	3	C5	[mis and trust	

The final 't' in line 1 is not distinctive enough to be heard and this is corrected by the TA in line 2. The repetition and the accompanying nod indicate that the word is correct; whilst the pronunciation is simultaneously corrected (the final 't' is clearly pronounced although not over emphasised and there is falling intonation). The interactional structure of the task has a built in opportunity for the pupil to display to the TA that they have oriented to the correction, by splitting the word into the component parts. In this case, once the word has been corrected by the TA in line 2 she moves on with the task by continuing her turn and providing the component parts herself ('so break it make it mis and trust.') and then turns directly to the next pupil. However, in line 3 of there is a repeat of the alternative provided (the /t/ is clearly pronounced by C5) showing that the

TA's repetitions are being monitored by the pupil for corrections and the correction has provided a successful repair. The structure of the task therefore supports the pupil in orienting to the repair.

5.8.3 Overlap of repeat to define meaning

There are times when the TA interrupts the pupil's repetition turn in order to define and explain the meaning of the word which is the focus of the repair. Once the meaning exploration is complete the task is moved on by the continuation of the TAs turn. This suggests that the TA is consciously looking for opportunities to explore meaning alongside the correction of the pronunciation of words, therefore engaging in pedagogical decision making. This is demonstrated in the following extract.

The group is taking it in turns to read a word and then split it into the component elements (core word and prefix or suffix). The word being read is *hostess*.

Extract 30 from case study 5 session 3 (47:15 long) Correction and explanation

25:17	1	TA	Ryaaan
	2	C4	hostees <i>looks at TA</i>
	3	TA	hoste?
	4	C4	hostees <i>looks at TA</i>
	5	TA	hostess
→	6	C4	ho[stess
→	7	TA	[hostess if you asked somebody to come round if I asked you all to come round to my house I would be the hostess ok because I'm hosting a bit of a party good right <i>looks down at book</i>

The word *hostess* is read with a long /e/ sound by C4 in line 2, with the following look towards the TA suggesting that he is unsure of the word. The TA repeats the beginning of the word in line 3 ('hoste') with a correction of the phoneme which is incorrect (changing the long /e/ to a short /e/), thus prompting the pupil to complete the word. However, this is heard by C4 as a prompt to read the word again which he does in line 4. This turn is a modified repeat turn (allowing the pupil to demonstrate that they have not in this case oriented to the repair). This suggests that the pupil is focusing on whole words, rather than the composite phonemes. The correction is then given by the TA (line 5) in the form of the whole word. This is repeated by C4, showing that they have oriented to the repair, although the repetition of the correct alternative of the /e/ is

overlapped by the TA who begins a new turn after the ‘ho’ of pupil C4 which is focused on providing an explanation of the word *hostess* (line 7). This is then chained to the selection of a new pupil to read another word, thus indicating (reinforced by the non verbal action of looking down at the book) that the task is moving on. This provides evidence that alongside correcting pronunciation there is a strong TA focus on developing semantic understanding. This is clearly important. However, this is done by presenting the definition to the pupil. Active participation and engagement would be better developed by asking the pupil what they understand by the word and developing the definition from there. Additionally, overlap with the repetition move can prevent the hearing by the TA of the lack of orientation to the repair. This means that opportunities for further repair are lost.

5.8.4 Overlap of repeat to continue task

The following extract shows another example of OIOR correction but where the pupil does not orient to the repair. In this extract the pupil begins their repetition, but this is overlapped by the TA with a turn which moves the task on.

The group is taking it in turns to put together graphemes in different combinations to form different words. The word which has been made is *rather*.

Extract 31 from case study 5 session 5 (28:23 long) Incorrect repetition by pupil overlapped by task continuation turn by TA

11:10	1	TA	what about the other end?
	2	C3	um (0.9) <u>r</u> ather looks at TA
→	3	TA	<u>r</u> ather
→	4	C3	<u>r</u> ather? nodding
	5	TA	yeah?
→	6	C3	and r[<u>a</u> ther
→	7	TA	[and take er the er sound where would we put the t h?

In line 2 the ‘a’ is pronounced as the short phoneme /a/ rather than /ar/. The pupil’s attempt at the word begins with ‘um’ and a 0.9 second pause, and is followed by looking directly at the TA, suggesting that clarification or correction is being sought. The correct alternative is provided by the TA in line 3. In line 4 the alternative is checked by C3 (‘rather?’). This could be interpreted as a repetition which confirms receipt, as the nodding suggests that the pupil recognises the alternative provided.

However, the rising intonation at the end of the turn provides evidence that the turn is performing a check or clarification. This interpretation is confirmed by the use of ‘yeah?’ by the TA in line 5; the rising intonation suggesting that the correct alternative is not yet clear to the pupil and she is checking that they have accepted the alternative offered. C3 takes the ‘yeah?’ in line 5 as a prompt to repeat. However, this is overlapped by the TA (line 7) after the initial phoneme is pronounced (/r/) (line 6 begins with ‘and’ which could suggest to other participants that he is going to move on to construct a new word from the graphemes). The use of ‘and’ in line 7 indicates that the task should move on, clarified by an instruction to put the graphemes in a new order (‘take er the er sound where would we put the er’). Importantly, the partial repeat by C3 in line 6 displays that he has failed to orient to the correct alternative (the /ar/ is still pronounced as a short /a/). However, the task has moved on and the trouble source remains unrepaired. It also demonstrates that semantic issues are not consistently noted and responded to by the TA; whereas in extract 23 the word ‘hostess’ was noted as new and explained, the word ‘rather’ in this extract was not. The continued mispronunciation by C3 is likely to signify a lack of semantic understanding. This is therefore a significant learning opportunity missed.

5.8.5 No repeat

There are occasions where a correction by the TA occurs and the interaction moves on, but there is no repeat or partial repeat from the pupil (either to accept or reject the correction) in a subsequent turn. An example of this is shown in the following extract.

Each pupil has a sentence and the task is to put them in order to produce a short letter. The group has already established the first 2 sentences of the letter.

Extract 32 from case study 7 session 3 (31:27 long) No repetition of correction by pupil

24:23	1	TA	no I know but can you read it whats your?
	2	C2	will you be (1.8) er m:y playground
	3	(1.6)	
	4	TA	<i>puts hand out for paper</i>
	5	C1	no that doesnt say=
→	6	TA	= er penfriend penfriend ok so its not Adams Er:::m who do you think Robert what does your sentence say?

188 seconds later

27:44	7	TA	what does your sentence say [will you be my
-------	---	----	---

8	C2	<i>pointing at words with pen</i>
9	(1.0)	[will you be
10	TA	<i>looks at C2</i>
11	(1.0)	
12	TA	p/e/[n/friend that's friend
	C1	[pen penfriend

In line 2 the word 'penfriend' is read as 'playground', although the 1.8 second pause and the 'er' indicate that the word has already been located as a trouble source by C2. 'Playground' is an incorrect reading of the word as printed and also pragmatically incorrect. A number of verbal and paralinguistic actions indicate that there is a trouble source in C2's turn (there is a 1.6 second silence following his turn (line 3); the reaching for the piece of paper by the TA in line 4; and the words 'no it doesn't say' from C1 in line 5). The TA takes the sentence from C2, and reads and then repeats the correct alternative with falling intonation, indicating correction ('penfriend.' line 6). She continues her turn by stating that it is not C2's sentence that is needed next for the task of constructing the letter and moving on to select another pupil to read their sentence. The interaction therefore moves immediately on after the correction of C2's trouble source, without any opportunity for repetition by the pupil. This suggests that for the TA the completion of the task takes precedence over the completion of the repair. Corrections without a repeat by the pupil move the interaction (and therefore the task) on, but do not provide evidence that the pupil has oriented to the repair.

There is evidence however in this interaction that the TA has noted the trouble source, and possibly the lack of repeat of the correction. Later in the interaction (after 188 seconds), once the initial task of reconstructing the letter is complete, the TA revisits this correction by asking C2 to reread their sentence. The opportunity is being taken to complete the repair sequence from earlier in the interaction by providing for a repeat of the correction in the form of C2 rereading the sentence containing the trouble source. However, the word remains a trouble source for C2; this is indicated by the lack of reading of the word 'my' (as in line 2, the pupil appears to have located the item penfriend as a trouble source before reading the word 'my') and the long pause (a total of 2.0 seconds) before the TA provides the correction. This indicates that the pupil has oriented to the fact that the word read previously is incorrect ('playground' in line 2) but has not oriented to the correct alternative ('penfriend').

This time, rather than reading the whole of the correct word as in the previous correction attempt (line 6) the TA stresses the first three phonemes of the word ('p/e/n'), before providing the whole of the final section, reinforced by repetition ('friend that's friend'). However, there is again no repeat turn by C2 (instead another pupil, C1, repeats the correct alternative). Therefore, the earlier repair sequence between the TA and C2 has been revisited but still remains incomplete.

5.9 Summary of results

It has been shown that TAs are actively looking for troubles and opportunities to repair these (in line with Macbeth, 2004; McHoul, 1990; Radford, Ireson and Mahon, 2006). In relation to repair it has been shown that different forms of exposure of the trouble source are in use (explicit and implicit indications of incorrectness followed by a prompt or hint, or a prompt or hint without either of these) and differ in the extent to which they prompt self repair.

It was found that there is a strong tendency for high level support strategies and correction. A range of specific devices used in repair sequences were noted in the data, some of which are activity specific:

- Relating trouble to previous learning;
- Repeating the correct part of the turn so far (prompted completion);
- Asking the pupil to sound the word out;
- Drawing on meaning (sense making);
- Picture clues as prompts;
- Use of gesture.

The repair devices used suggest a focus on task completion.

Repeated troubles may be responded to with correction if another strategy has previously been used with that or another pupil. There are a number of occurrences in the data of correction by TAs following OISR attempts which fit with findings found by

Radford (2010b) in relation to teachers who work with pupils with SS LD. However, the use of correction is high, and not withheld over significant numbers of turns (as found by Radford, Blatchford and Webster 2011) and significantly, the evidence shows that one use of correction by TAs is as a way of moving on with the completion of the task and can leave troubles unresolved. The evidence from this turn by turn analysis of interactions supports the findings of Blatchford *et al* (2009b) and Radford, Blatchford and Webster (2011) that there is a tendency for the interactions between TAs and pupils to be focused on task completion rather than talk about the learning. The evidence from this analysis shows that this leads to lack of opportunities for self-repair, which would develop pupils' independence and metacognitive strategies. It also shows that this does not always allow for sufficient monitoring of repeats of corrections by pupils, which is the key to monitoring the engagement of the pupil with the learning point. Overlapping speech has been shown to be problematic in relation to this.

Chapter 6 Results: Topic - Topical pursuit, curtailment and relevance

6.1 Introduction

In this and the following chapter, talk-in-interaction during literacy intervention sessions will be explored using Conversation Analysis (CA) as an analytical framework, with a focus on topic management practices. The research questions considered in this chapter are:

- What general practices are used by teaching assistants (TAs) and pupils for the management of topic during literacy tasks?
- What are the implications of these practices for the moment-by-moment learning experience of pupils?

Specifically, this chapter will focus on practices related to topical pursuit, curtailment and relevance.

As yet the processes entailed in managing topic during TA led literacy intervention sessions are unexplored; it cannot be presumed that the practices in use by TAs and pupils are the same as those in use in mundane conversation; by teachers and pupils; or by TAs and pupils during classroom activities. Therefore, topic management practices found in the empirical data will be explored in an inductive way. The findings will be discussed in terms of beginning to build theory (what practices are found to be in use and any relationships between these and the learning experience of individuals and the group) and the implications of this for policy and practice will be briefly outlined (these are expanded on in chapter 8).

Maintaining socially shared cognition in mundane conversation is of paramount importance for all parties involved, and a variety of practices are used to do this (Schegloff, 1991); however, in talk-in-interaction which occurs in the institutional teaching and learning context, the points at which troubles occur have the potential to support the accurate assessment of the pupil's current knowledge, skills and understanding and their engagement with the learning experience. They also provide

the opportunity for fine tuned support to be given to develop these (Macbeth, 2004; McHoul, 1990). Whereas interactional troubles need to be reduced, it can be argued that trouble sources in relation to topic need to occur in order for assessment and learning opportunities to occur. In order for an ‘intermental development zone’ to be created by the teacher and learner together, this requires equal dialogue and constant renegotiation (Mercer, 2000). Within this, sequences of triadic dialogue can operate as ‘zones of negotiation’ (Radford, Ireson and Mahon, 2006) which operate when the interaction is operating beyond the learner’s current developmental level, and the adult is responsive to the learner’s agenda. The learning experience is maximised when the initiation move requests genuine information from the learner and the follow-up move builds on the response in a dialogic way. The reader is referred to chapter 2 for a full discussion of topic practices.

6.2 Overview of results

TAs are found to be using practices which restrict the extent to which pupils’ individual contributions are taken up in the interaction. These practices can operate to reduce the level of challenge in relation to the academic and interactional knowledge and skills that pupils engage with. Pupils’ contributions are restricted to lower level inputs, and TAs supply the higher level contributions. Although the resources that pupils are drawing on are potentially more limited (as they are all below the level of their peers in relation to literacy), it is demonstrated that pupils are capable of actively contributing (with the support of the TA) more than is generally demanded of them.

The following specific practices used by TAs in relation to the management of topic are found to be in use and explored in detail:

1. Use of topically irrelevant questions.
2. Checking contributions for topic relevance and appropriateness.
3. Narrowing the range of candidates accepted.
4. Providing explanations.

It will be shown that these practices:

- Focus on the production of predetermined end products;
- Close down opportunities for dialogic talk;
- Focus on modelling and vocabulary development;
- Reduce pupil engagement with higher level academic and interactional skills.

An overview of the spread of data in relation to topical pursuit, curtailment and relevance can be found in Table 8. This shows how often the practices presented occurred in the data. Where data has not been provided for phenomena, this is because they are unique; they show a practice rather than suggesting it is general.

Table 8: Topical pursuit, curtailment and relevance: overview of data

	Number of prompted relevance checks	Number of pupil topic initiations taken up at end of activity	Number of topic curtailments by TA	Number of times an item from range of candidate items selected by TA	Number of times TA provides definition	Number of times TA expands pupil answer
Case 1	0	2	6	3	0	4
Case 2	1	2	8	3	1	8
Case 3	0	1	2	4	0	4
Case 4	0	1	3	2	1	5
Case 5	1	10	16	1	17	8
Case 6	1	5	6	0	6	1
Case 7	3	3	3	3	1	4
Case 8	1	2	3	4	2	2

6.3 Use of topically irrelevant questions

The data show that TA questions which require a yes/no answer can operate as pseudo questions, in that the outcome of the question is not relevant to the overall task; the task continues regardless of the candidate answer that pupils select. Although it is demonstrated that pupils interpret these questions as opportunities for extended topical pursuit, this is discouraged by the TA. In the following example, pupils are asked to carry out a talk partner exercise to decide whether they think the answer is yes or no to a given statement. The question is phrased as a closed question, however it might be

expected that in order to come to an agreement in a pair as to the answer an element of reasoning needs to be involved. This is how it is heard by the pupils; however, during the interaction pupils are actively dissuaded from this.

The pupils have completed a talk partner exercise about the sentence on the whiteboard ‘When I went out into the playground I saw a big boy.’ The TA asked them if Pip really did see a big boy. The last two words were then changed to little girl and the exercise repeated. The TA has now changed the last two words to blue dog.

Extract 33 from case study 8 session 2 (33:40 long) Closing down topical pursuit

06:12	1	TA	listening w[hen I went out in the playground I saw a blue dog <i>reading from whiteboard</i>
	2	Group	[hen I went out in to the playground I saw a blue dog <i>reading from whiteboard</i>
	3	C2	not real not real [not real not real
→	4	TA	[talk it over did he really see that?
	5	C1	fiction
	6	C2	fiction fiction yeah (inaudible) fiction
→	7	TA	we’re not talking about story and non fiction were just talking about whether do you think he saw
	8	C2	not real because um um pip didn’t see it because he’s ins::ide
	9	TA	↓ok
	10	C2	and this is reason why he didn’t see it theres no such thing as blue dogs
	11	C?	yeah there
	12	C4	↑yeah
	13	C2	theres not
	14	C?	there
→	15	TA	this is just for the pip sentence if you think he didn’t thats fine so lets
	16	C2	theres only a black one and a brown one [and a yellow one <i>hand up.....</i>
	17	TA	[ok lets sound this lets sound top this and then blend it <u>so</u>

In line 2 C2 anticipates the question (the same question has been asked for the last two sentences) with ‘not real’. This could be an attempt at providing a candidate answer (it could be interpreted as a version of ‘not true’), however, it is more likely that she is providing the reason for an answer ‘no’, i.e. the dog is ‘not real’. This can be heard in subsequent utterances when C2 takes up C1’s reference to ‘fiction’; offers a reason for her answer (line 8); and offers further evidence to support her assertion (line 10). When challenged on this last point by other pupils in lines 11 and 12 (the challenge by C? ‘yeah there’ is incomplete but is agreed with by C4 ‘yeah’) she defends her position and offers a further point to support her reasoning (line 16). For the type of task set the

actions of C2 are very relevant – she states a position and defends it, drawing on appropriate evidence. The difficulty however appears to be with the task itself. It has been set as a talk partner task, and when C2 offers an immediate response a reminder is given by the TA to ‘talk it over did he really see that?’ (line 4). This both reinforces the need for a yes/no answer (‘did he really see that’) whilst suggesting that an element of reasoning is necessary (‘talk it over’). However, there is then an attempt to curtail the topical pursuit of the pupils and refocus them solely on agreeing a yes/no answer in line 7. Rather than resulting in a yes/no candidate answer however, this leads to C2 offering a more practical reason for why Pip might not be able to see the dog (‘because he’s inside’ - line 8). The response from the TA in line 9 might be considered as an acknowledgement of C2’s response. However, the downward intonation could also signal an attempt to move on with the task. When C2 continues with another reason in line 10 and a discussion begins between the group about whether blue dogs exist (lines 11-14) the TA attempts to close down the discussion, making clear that only a yes/no answer is required and that it does not matter which is chosen (i.e. there is no need to defend any position): ‘this is just for the pip sentence if you think he didn’t that’s fine’ (line 15). She then indicates a need to move on with the task (‘so lets’) but C2 continues with her defence in line 16. The TA then does move the task on, overlapping with C2’s talk and continuing beyond it (line 17).

There are a number of issues of note in relation to the learning experience. The question is considered to be a genuine one by the pupils, and they engage in topical pursuit in relation to their answer. It is clear from the interaction however, that pupils are not expected by the TA to provide explanations and reasons; and whichever candidate answer they decide on is not relevant in relation to moving the task on. Radford, Blatchford and Webster (2011) found closed questions with this grammatical format (yes/no interrogative) to be in use by TAs and conclude that asking pupils to justify their reasoning would lead to pupils being more active participants in the interactions analysed. These data show pupils being actively stopped from doing this when they attempt to. Moving the task straight on to the sounding out without the yes/no discussion (focusing purely on the reading aspect) would be preferable in this learning episode, as the answer is irrelevant to the ongoing interaction. If however comprehension was a key learning objective, then allowing full time for dialogic talk

(deciding on a yes/no answer and reasons) would be needed. As it stands, the task is interpreted by the pupils as a dialogic one, but is closed down throughout in order to move the task on.

Whereas in the previous instance the task was set up as dialogic but then the talk was closed down, in the following instance the task is introduced in a more restrictive way and this is reinforced through the interaction. However, again the pupils respond to it in a more dialogic way, and there is evidence that some formations are more likely to be taken up by the TA than others.

The group is being given their homework sheets on which they will be writing what they think will happen next in the story they have been reading. The sheet has the picture of the next page in the book, but the text has been replaced with lines for them to write their own formulation on.

Extract 34 from case study 5 session 2 (54:09 long) Restricted candidate answers opened up

51:41	1	TA	what do we thinks going to happen (1.0) do (1.0) simple yes or no <i>leans down to get homework sheets</i> <i>holds hand up</i> (.) do you think they're going to stay Adam yes or no <i>gives him homework sheet</i>
→	2	C6	I think they're gonna stay=
	3	TA	=yes or no yes or no <i>shaking head</i>
	4	C6	er yes <i>nods</i>

(14 seconds not transcribed when two other pupils give their candidate answers)

52:11	5	TA	<i>gives homework sheet to C4</i> what d'you think Sh Sham?
→	6	C4	yep <i>nods</i>
	7	TA	yes
→	8	C4	cos the cos they look happy
	9	TA	they look happy thats a good point they do look happy <i>gives homework sheet to C5</i>

An adult's use of the qualifier verb 'think' has been shown to be a topic elicitor which offers varying degrees of authority to the learner depending on how it is used within the adult's turn (Radford, 2010c). In line 1 the construction by the TA is initially one which could lead to a number of candidate answers: 'what do we thinks going to happen'. However, this is a lead in to the question (setting the task) rather than the

question itself, which is closed: ‘do you think they’re going to stay’, with the inserted clause ‘simple yes or no’ making clear that one of these two candidate answers is to be used. The ‘simple’, emphasised by holding her hand up, reinforces that an extended answer (a reason or explanation) is not required. Reiteration of this expectation is contained in the selection of the next speaker: ‘Adam yes or no’ (line 1). Rather than providing a yes/no answer however, C6 formulates a complete sentence: ‘I think they’re gonna stay’ (line 2). This receives a command to reformulate in line with the candidate answers provided, emphasised through repetition: ‘yes or no yes or no’ (line 3) which he does in line 4, reinforcing the yes with a nod. Later in the same extract (line 6) C4 provides a candidate answer which fits the choice: ‘yep’, confirmed with a nod. This is receipted (and corrected in relation to standard English) by the TA through repetition in line 7. C4 then adds a reason for his choice in line 8, drawing on the information from the homework sheet, which is taken up by the TA in line 9: ‘they look happy thats a good point they do look happy’. Consistently in the data, once pupils have stated a yes or no they are much more likely to be able to express additional reasons or explanations and have these taken up. In terms of implications for the learning experience, the group will be taking the sheets home and writing the next section of the story. This will not be expected to be a yes/no (which would not be a plausible candidate answer to the question ‘what happens next?’) but a full sentence which, ideally, would contain an aspect of reasoning for why they decide to stay or go. Neither C6 nor C4 have had the opportunity to rehearse the full sentence that they will write, and C6 has changed his sentence from one which would have been a plausible beginning to the homework task to one which would not.

6.4 Checking contributions for topic relevance and appropriateness

There are instances in the data of pupils being given the opportunity to decide for themselves whether the contribution they are bidding to put forward is topic relevant. This has the potential to support the pupil in developing greater independence, and it is notable that in all the instances found the pupil is able to make a decision about the relevance of their contribution to the topic which proves to be accurate. The following extract shows a pupil confirming that their utterance is relevant, and then having it taken up.

The TA is explaining how there and their sound the same but are spelt differently.

Extract 35 from case study 7 session 1 (32:21 long) Prompted relevance checking leading to topical pursuit

14:13
 1 TA so that is the one when you're saying when you say th [ere ok the other one is their
 2 C4 [hand up
 belonging
 3 TA yes d er Vernon is this so[omething to do with th talking
 C4 [points at board then looks at board
 4 C4 yeah um the third one um there thats our tricky word as well
 nods then points at board
 5 TA it is its the same one what you do in your classroom isnt it the same what we're
 learning here

The TA completes her explanation in line one before responding to the bid by C4 in line 3. The initial invitation to contribute 'yes' is changed to a request that the pupil self checks for topic relevance: 'er Vernon is this something to do with th talking'. C4 confirms that his comment is relevant by pointing at the board after 'something to do' and following this up with the verbal and gesture confirmation: 'yeah', accompanied by a nod of the head (line 4). This leads directly into the provision of further information related to the topic: 'the third one um there thats our tricky word as well'. This point is taken up as relevant by the TA in line 5.

When prompted, pupils appear to be equally able to decide on, and then indicate, that their intended contribution is not relevant to the topic, as shown in the following extract.

The group are just finishing reviewing the split digraphs that they know.

Extract 36 from case study 6 session 2 (51:30 long) Prompted relevance checking leading to curtailment

05:22 1 TA [e something ↑o or o something e
 swapping over gesture with hands
 → C5 [hand up.....
 2 C1 o [something e
 TA [o something e good well done
 C5 continued hand up.....
 3 C5 Mrs Wickham
 continued hand up
 4 TA no not unless its to do with [ALS cos we've got to get on (.) havent we
 C5 [smiles
 yeah
 5 C5 nods
 → 6 TA is it to do with ALS?
 → 7 C5 shakes head
 8 TA no right well then we'll talk about it at the end if we get time ok

C5 has had his hand up throughout lines 1 and 2, anticipating the end of the interaction between the TA and C1. Once this is complete he adds to his bid with the verbal request to contribute ('Mrs Wickham' – line 3). His bid occurs at the end of the current activity, which may be why she suggests that his contribution may not be relevant ('no not unless its to do with ALS'). She then provides a reason ('cos we've got to get on'), checking his understanding of this ('havent we yeah?'). C5 nods in agreement (line 5) and the TA then asks him to confirm whether his intended contribution is relevant ('is it to do with ALS?'), and he is able to indicate that it is not by shaking his head. The contribution is not therefore made, and the decision over its relevance has been the pupil's.

In both the previous examples, the relevance was checked before the contribution was made. In the following extract however, the pupil begins the contribution but the topical pursuit is then interrupted in order for a relevance check to occur.

The pupils have been looking at the front cover of the book 'Not me said the monkey'. The TA has asked if any of the pupils have done something and pretended that somebody else did it because they did not want to get into trouble.

Extract 37 from case study 2 session 2 (26:36 long) Relevance checks inserted into topical pursuit

09:00	1	C2	something happened (when) on tele
→	2	TA	on tele?
	3	C2	yeah
→	4	TA	is it is it to do with what we're talking about?
	5	C2	yes
→	6	TA	cos this is what we're talking about today
	7	C2	like on monkey
→	8	TA	mm
	9	C2	(inaudible) eat banana and one of one of the babies got lost
	10	TA	oh right w that was that programme you were watching?
	11	C2	yeah
	12	TA	ok

The part of C2's utterance in line 1 which triggers a relevance check by the TA is 'on tele'. This is repeated by the TA in line 2 with an upward intonation, suggesting that any discussion of a television programme is unlikely to be relevant to the topic. The 'yeah' by C2 in line 3 is heard as the response to a hearing check rather than a relevance check and so the specific question is asked by the TA in line 4: 'is it so is it to do with

what we're talking about?'. Even when a 'yes' is provided to this question by C2 a further reinforcement of the need for a self relevance check is made: 'cos this is what we're talking about today' (although there is no gesture or verbal reminder of what 'this' is). It is the word 'monkey' in C2's utterance in line 7 which leads to the phatic 'mm' (line 8). A phatic is a turn which is empty in terms of content, but has been shown to lead to the production of further topical material in the learner's following turn (Radford, Ireson and Mahon, 2006). It therefore demonstrates that the TA is allowing the pupil's contribution as relevant. Interestingly however, the contribution relates to the title of the book and the picture on the front, but not to the question of whether the pupils have done anything and pretended it was someone else. This demonstrates that there is some flexibility in relation to topical pursuit – a specific answer might be delayed and other contributions taken up if they relate to the more general topic. As it is the word 'monkey' (line 7) which leads to the take up, it can be argued that a key topic word can provide the trigger for this.

The data show that TAs are actively considering the potential relevance of contributions to the topic. The need for this is seen in the occurrences of what are heard by the TA as non relevant contributions. However, it is notable that these occur at the end of a TCU which could feasibly form the end of the activity or explanation taking place. The following extract comes from approximately two minutes later in the same session as extract 37.

The TA is reviewing the tricky words on the board that the pupils have been learning.

Extract 38 from case study 7 session 1 (32:21 long) New topic initiation following TCU curtailed by TA

16:12 →1	TA	can you see that so that is your third tricky w[ord	
2	C6		[mrs Rainer hand half up
3	TA	e yes (.) Vernon	
4	C6	and (heres) what um when it was dinner my head went like that and my sister	puts head down bangs head
		laughed	
5	TA	looks away and starts to pick up board rubber	
6	C6	it didn't hurt though	[well it did hurt a bit
→7	TA		[Vernon lets talk about what were l:earning ok not turns to C4
		what happened earlier on now because we're talking about learning ok	rubbing words out turns back to C4
8	C6	yeah	taps forehead
9	TA	so that was your third tricky word	

The bid from C6 (line 2: ‘mrs Rainer’ accompanied by hand half up) predicts the end of the TCU in line 1, which is also feasible as the end of activity (the explanation of the three tricky words on the board): ‘so that is your third tricky word’. C6 is invited to contribute (line 3) and provides a recount of a previous event not connected to the activity in line 4. This utterance is not receipted by the TA, who instead turns away (line 5). This attempt to close down the topic is not responded to by C6, who continues in line 6. The TA therefore uses a verbal direction and explanation to curtail the topic (line 7) which is verbally accepted by C6 in line 8 (‘yeah’), although the accompanying gesture still relates to the topic of his hurt head. The TA then continues with the session by restating the end of the previous activity: ‘so that was your third tricky word’ (line 9), therefore returning to the original topic.

There are two key points here. Firstly, it appears that the TA is much more likely to check the relevance of a contribution before allowing it if the bid occurs during an ongoing topical pursuit. Secondly (and arguably partly because of the first point), non relevant contributions are more likely to occur in the spaces between activities.

In the spaces before and after TA led there are numerous examples of pupils having the topics they initiate taken up. However, it is clear that the TA also monitors the ongoing topical pursuit for its appropriateness, and can take action to curtail it. In the data these instances appear to relate to specific topic areas. As already seen, the topic of television is often closed down (as is popular culture generally – other examples in the data included computer games such as Wii Fit). Other topics found to be closed down by the TA include death and ‘horror’. Extract 39 shows the first of these, and extract 40 the second.

The group have entered the room for their ELS session and the TA has asked how they are today.

Extract 39 from case study 7 session 3 (31:27 long) Topic curtailment – ‘death’

00:16	1	C6	I miss my mum and dad because they gone on holiday
	2	TA	oh they’ve gone on holiday a::h you miss them?
	3	C6	[yeah nods
	4	C5	[my mum and dad [()
	5	TA	[thats all right they’ll be back soon before you know it anyway wont they

	6	C2	I miss my granddad
	7	TA	uh? <i>turns head towards CS2</i>
	8	C2	I miss my granddad
	9	C1	where is he
	10	(1.0)	
	11	C2	had a heart attack
→	12	C6	yeah yeah he died
→	13	TA	thats ok lets not talk about anything else now lets ↓see good afternoon all
	14	Grp:	good afternoon Miss Rainer

The topic introduced by C6 in line 1 is taken up by the TA who confirms receipt of the information and reaffirms the feeling described (line 2). A potential contribution by C5 is not taken up, as the TA continues to follow the topic introduced by C6, offering reassurance (line 5). When this action is complete a contribution by C2 is taken up, in that a hearing check occurs ('uh?' accompanied by turning her head towards them). There follows a short sequence where the pupils in the group build on each other's contributions (lines 8 to 12). The topic is curtailed by the TA however after C6 says 'he died' (line 12). There is a phrase 'thats ok' which might be interpreted as reassurance, swiftly followed by 'lets not talk about anything else', closing down the topic of death, and then a topic shift to start the ELS session: 'now lets ↓see good afternoon all'. This last formulation is recognised and responded to by the pupils in the group as the start of the session (line 14). This completes the topic shift, ensuring that the previous topic is not returned to.

Other times that topics initiated by pupils are taken up by the group (including the TA) are during activities such as colouring and drawing. Again however, the topic is monitored by the TA and can be curtailed. This is seen in the following extract. In this case this happens when a graphic description of an accident (what might be described as 'horror') occurs.

The group are colouring in the pictures they have drawn on the covers of books they have been making to keep their ALS work in.

Extract 40 from case 5 session 5 (28:23 long) Topic curtailment – 'horror'

21:26	1	C3	yeah and I always play matches that means I'm a professional footballer
	2	TA	no you're not not unless you get paid for it
	3	C1	not unless you get the medals=
	4	C4	=I get paid for it=

	5	C1	=get trophies
	6	C3	[when I go professional they'll give me like one hundred thousand pounds
	7	C1	[the trophy costs
	8	C1	the trophy costs
	9	TA	you've got to be extremely [lucky to go professional and you've got to be
		C3	[and I've got two pounds
			extremely good to be a professional
	10	C1	you are
	11	C3	I am
	12	C4	I'm I'm really good at act[ing thats why I do it every year
	13	C2	[but at school some people in football sometimes
			you trip over
	14	C3	I do it every year
→	15	C1	yeah then you (.) put your [did you see that man he nearly cracked his brains
		C4	[yeah like I care
			and he had this black shield on his head
→	16	TA	right shall we get on with what we're doing please Sham

The topic which has been introduced by C3 is that of professional footballers (line 1). This is taken up by the TA, who corrects his statement in line 2, and topical pursuit continues which includes all members of the group and the TA in lines 3-15 (although C4 and C2 begin a new parallel topic in lines 12-15). However, the TA curtails the topic in line 16 with 'right shall we get on with what we're doing please Sham'. The reason for the curtailment is not verbalised by the TA but 'Sham' is C1, so the topic curtailment is clearly linked to his explicit description of a football accident in line 15 rather than the developing disagreement between C4 and C2. In this case therefore it is the statement 'he nearly cracked his brains and he had this black shield on his head' which prompts the curtailment.

The monitoring of topic also occurs in relation to the artefacts which pupils produce. Both TAs and pupils monitor each other's products for 'unsuitable' topics and these are taken up in the talk-in-interaction. In the following example another pupil draws the TAs attention to a drawing which draws on a popular cartoon character. The TA then rejects the drawing produced as not sufficiently related to the topic.

The pupils are drawing pictures on the front of a book they have made to keep their work about the story they have been using in their ALS sessions.

Extract 41 from case study 5 session 4 (43:45 long) Identification of an unsuitable drawing

41:40 → 1	C1	he's done (inaudible) four arms in ben 10 pointing at the work of C3
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2	C3	no he has scorpion tail
→3	TA	no does the does zach or zowee have sc a scorpion tail?
4	C5	<i>laughs</i>
5	C3	<i>shakes head</i>
6	TA	no mrs wickhams rubber is going to be <u>very busy</u> (2.7) I told you not to do it
7	C1	and that has four arms <i>pointing at the book of C4</i>
8	C5	I done [pencils
9	TA	[right ok I'm gonna collect these books in I think for today (0.6) so that my rubber can do a little bit of rubbing right thank you lets have these (.) books now

C1 first draws attention to the drawing produced by C3 in line 1, both verbally ('he's done (inaudible) four arms in ben 10') and non-verbally (by pointing). Ben 10 is a popular children's cartoon series and it appears that the pupils in the group are very aware that it is a topic which is likely to be curtailed. This is demonstrated in the use of 'he's' in C1's utterance (directed at the group and therefore drawing the attention of the TA) and the immediate rejection of the suggestion by C3 ('no he has scorpion tail' – line 2). However, this description of the drawing is not sufficient to avoid it being rejected by the TA as a suitable item for the front cover. A number of actions by the TA then follow, each of which works to reject the item in increasingly concrete ways. Firstly she draws attention to the fact that it is not relevant to the story being covered by the group through the question 'no does the does zach or zowee have sc a scorpion tail?' (line 3). This is accepted by C3 by a shake of the head (line 5). She then makes clear that she will be physically removing the drawing: 'mrs wickhams rubber is going to be very busy' (line 6). Following the indication by C1 that C4 may also have produced a drawing which is related to the cartoon (line 7) the TA then finally curtails both the topic and the activity by reiterating that she will be physically removing these drawings, this time directing the pupils to hand their books to her.

There are also cases in the data when pupils check what they are about to do with TA before carrying out the action, demonstrating their awareness of the monitoring practice. This is seen in the following extract.

The group are colouring in the front covers for their ALS folders in which they keep their worksheets. On the front is a cut out picture of an alien from the story the group are reading, ready for colouring.

Extract 42 from case study 6 session 4 (28:53 long) Pupil seeking permission for drawing

24:40 →1	C4	can you draw a crown on er something on his hand
2	TA	if you want to
3	C4	yay I'm drawing a ring <i>drawing</i>
4	C3	:hhh (2.0) :hh [oh yeah [theres a ring on his hand <i>looks at picture</i> <i>[pointing</i>
	C4	<i>[laughs</i>
5	C5	↑ring ↑ring

In line 1 C4 checks with the TA that he can add his own drawings to the picture of the alien provided. Interestingly, he first asks about drawing a crown, then changes this to 'er something' (line 1), widening the possibilities. Having received affirmation from the TA in line 2 he then goes on to draw a ring, something which all the pupils in the group find amusing. Line 3 shows C4 expressing pleasure that he is drawing this, followed by a laugh and the action of drawing attention to the drawing by C3 in line 4, further laughter by C4 and a ringing noise by C5. It would appear that there is a reason that C4 checked with the TA before drawing this item; it holds meaning to the group as a topic of amusement and C4 therefore pre-empted the possible curtailment of the topic by gaining permission first.

There is one further important practice which was found in the data. This was that the topic raised was identified by the TA as relevant to a later topic. This specifically occurred when pupils were being asked questions about a book, as in the following example.

The group are looking at the front cover of the book 'Not me said the monkey' and the TA has said that it is about a monkey who tells lies.

Extract 43 from case study 4 session 2 (29:17 long) Recycled topical item

01:54	1	C5	my sis my sister tells lies and (inaudible)
→	2	TA	does ↑she if you keep <u>that</u> to [yourself cos I'm going to ask you some
		C5	<i>[nods.....]</i>
		C5	questions (.) through this book and you'll be able to tell] me
		C5	<i>continued nodding.....]</i>
			exactly what you're going to tell me now ok?

(126 seconds not subscribed, during which the TA asks questions about the pictures in the book and the pupils offer candidate answer)

04:11	3	TA	well actually thats the next question I'm going to ask you what do you think the
-------	---	----	--

monkey could be saying [back to the l[ion what do you think he could be
 saying
 C4 [hand up
 C3 [hand up
 C1 [hand up
 → C5 [hand up.....
 back to the lion Tom?=
 nods at C4
 4 C4 =not me
 C5 continued hand up
 5 TA he could be saying n ↑why would he be saying not me?
 C5 continued hand up.....
 6 C1 cos he's em trying not e don't want to get into trouble
 C5 continued hand up.....
 7 TA he's doesnt want to get into trouble so he's saying not me
 shakes head
 C5 continued hand up.....
 → 8 C5 miss rainy you know what when when my sister um takes my things she never
 tells mummy the tru[th
 9 TA [a::h

In line 1 C5 begins to talk about his sister, providing the information that she ‘tells lies’. The TA acknowledges the information (‘does ↑she’) but stops him from providing additional information at that point, asking him to ‘keep that to yourself’ and indicating that it will be more relevant at a later point. Although she does not pinpoint exactly when it is likely to be relevant, it is clear from the subsequent interaction that C5 is monitoring the ongoing interaction for a question to which the held information is relevant. 126 seconds later in line 3 C5 bids for a turn following the question ‘what do you think the monkey could be saying back to the lion?’ and continues the bid until after another pupil has had the candidate answer ‘not me’ accepted by the TA (in line 5), and a follow up question has been asked and answered (lines 5-7). When selected he then provides information about his sister: ‘when when my sister um takes my things she never tells mummy the truth’ (line 8). It is likely that this is the additional information which he first attempted to put forward in line 1, as it continues the topic from that point in the interaction by providing an example to demonstrate that his sister tells lies. The TA accepts this further information (‘a::h’ – line 9), indicating that it is considered relevant at this point by both parties.

It has been shown that TAs and pupils monitor ongoing contributions to the topic for both relevance and appropriateness. Although they provide some degree of freedom for pupils to decide on the relevance of their contributions, there is evidence that TAs control topic. This is in line with the findings by Skidmore, Perez-Parent and Arnfield

(2003) in relation to teacher led guided reading sessions, where teachers were found to always have the final word over what was defined as relevant in the interaction.

6.5 Narrowing the range of candidates accepted: ‘That’s right, that’s what I was thinking’!

There are examples in the data when, although questions are asked by the TA, and the opportunity is given for pupils to put forward candidate answers, one specific answer (which appears to be predetermined) is taken forward. Sometimes this candidate answer is provided by one of the pupils or, as in the following example, it is not a candidate answer given, but one added by the TA in order to move the topic forward.

The TA is scribing a reply to a letter that the group have received from the fictional character Pippa asking questions about their ELS sessions. The previous day the TA had scribed notes for the letter and these are displayed on the board.

Extract 44 from case study 7 session 4 (28:55 long) TA led topical pursuit

20:24	1	TA	so lets see was what was the next ↑one
	2	(1.0)	
	3	C4	er
			<i>hand up</i>
	4	TA	things we have been learning here wasnt it
	5	C3	<i>hand up</i> I know
		C2	<i>hand up</i>
	6	TA	<i>looks at C3</i>
	7	C3	tricky word
	8	TA	yeah
	9	C1	our grapheme cards
	10	TA	yeah our grapheme cards what else err Vernon
	11	C3	sounds
	12	TA	sounds yep so
	13	C4	tricky words
	14	C1	tricky words
→	15	TA	yeah so we’re gonna write down maybe we’re gonna write down we learnt to spell the words yeah? Cos thats what we wrote made a note of it so we’re gonna pick out the wor a sentence we wrote small sentence in a short version like to help you writing a letter can you leave the boards alone please Adam

Both C3 and C2 bid by raising their hand to offer candidate answers for ‘things we have been learning’ (line 4). C3 (who adds a verbal bid ‘I know’), is selected by the TA (who looks directly at them in line 6) and offers the candidate answer (line 7). This is acknowledged by the TA but not taken up. Another candidate answer is then offered by

C1 in line 10. This is again acknowledged by the TA but again not taken up; instead the TA asks for other candidate answers, which are provided in lines 11, 13 and 14. These are all acknowledged but not taken up. In line 15 the TA then introduces the answer which will be taken forward, which is not one given by the pupils ('we're gonna write down we learnt to spell the words yeah?') providing the explanation for this choice that they made a note of this before (this was in the previous session). Although presented with a raising intonation (suggesting a question) and 'maybe' as a modifier, the format of the utterance is a statement of what will happen, using 'gonna' (going to) as an intention and 'we're' excluding a difference of action by an individual. The activity therefore provides the opportunity for pupils to offer candidate answers and have them acknowledged. However, the learning point (that notes made previously should be used to construct the letter) is not used by the pupils, and is only used by the TA at the end of the learning episode as an explanation for selecting a different candidate answer. Pupils are not encouraged to use the notes themselves to locate the specific answer required.

In the previous extract, a predetermined answer had been decided on with the group (in the notes made the previous day). However, even where questions have the potential to be more genuine, the data shows that they are often actually questions to which a specific, predetermined response is required in order to move the task on. The following extract shows a response to a question from a TA, which is then responded to in a way that demonstrates the working towards a specific response in terms of both topic and format.

The group are writing a story about forgetting something. The group have written a sentence that says either 'I forgot my bookbag' or 'I forgot my lunchbox' (they have chosen which noun to insert).

Extract 45 from case study 1 session 1 (40:22 long) TA selects candidate item for topical pursuit

06:33	1	TA	so imagine if you had come to school today and you'd forgotten to bring your book bag what do you think would happen [(.) how would [you [get it Carolina
		C3	[hand up
		C5	[my [hand up
	2	C3	you you you if you forgot and the bus went somewhere else you you will be very sad and if you are school dinners you will be very sad because you havent got no money
	3	TA	you havent got any lunch have you if you got lost your lunch box but

		what would happen is the school would give you a dinner so you wouldnt lose out but if you just left your book bag at home (.) then what do you think would happen
4	C3/C5	<i>hand up</i>
5	TA	yes Colin
6	C5	um your mum would take it to the office
→ 7	TA	thats right that was what I was thinking so that would be a good sentence to write today wouldnt it what could we say my mum
8	C2	took
9	TA	gave my
10	C1	book bag to the office
11	TA	to the office or if it is you[r lunchbox yes I'm going to leave a space for
	C1	[lunchbox
		you when we do our sentence

The response by C3 in line 2 appears to be to the question ‘what do you think would happen’ (as her hand goes up after this part of line 1) rather than ‘how would you get it’. Her response is taken up and discussed by the TA; however, whilst the response could be used to form a sentence in the story being written, it is not taken up in this way. Instead, the TA rephrases the question adding the phrase ‘but if you just left your book bag at home’ (line 3). It is evident from the subsequent interaction that this is designed to restrict the possible candidate answers. The response from C5: ‘your mum would take it to the office’ (line 6) is responded to with: ‘thats right thats what I was thinking’, demonstrating that a ‘correct’ answer was being sought – the one that the TA was thinking of. This answer is then taken forward to the written task: ‘so that would be a good sentence to write today wouldnt it’. Although there is another apparent opportunity for the pupils to shape the sentence to be produced in line 7 the topical pursuit is actually highly directed by the TA. She provides the beginning of the sentence ‘my mum’, and changes ‘took’ (C2 – line 8) to ‘gave my’. The only variation taken up is ‘lunchbox’ (line 11), in line with the previous sentences written by the pupils. Therefore what appears to be an opportunity for pupils to contribute original ideas to the construction of a piece of writing is highly directed by the TA in order to produce a specific product. This is a very different practice to that found to be in use by teachers working with children with specific language difficulties (Radford, Ireson and Mahon, 2006) which orients much more to the child’s own topical ideas. It is, however consistent with findings by Skidmore, Perez-Parent and Arnfield (2003) that teachers in guided reading sessions tightly control topical pursuit.

6.6 Providing explanations

Throughout the data TAs are engaged with the practice of topical extension; however, there are a number of examples where rather than developing the pupils' skills in relation to this, TAs provide explanations themselves. Here are discussed the devices used by TAs in:

- Vocabulary development; and
- Extending yes/no answers to comprehension questions.

6.6.1 Vocabulary development

The area of vocabulary is one which features heavily in relation to the provision of explanations. Pupils will self initiate other repair in the area of vocabulary, and TAs provide them with explanations, as in the following extract.

The group are playing 'hotpicks' which involves joining graphemes to create words. C1 has created the word 'shift', then the word 'shack'.

Extract 46 from case study 5 session 5 (28:23 long) TA provides definition

07:36	→1	C1	what does shift mean?
	→2	TA	shift means move
	3	C1	oh

However, there is evidence that within the group pupils are able to contribute to explanations for each other in relation to the meaning of vocabulary. In the following example, although a definition is sought from the TA and provided, two other pupils were able to contribute to a definition.

The group are carrying out a spelling activity, with words containing the grapheme 'oa'

Extract 47 from case study 5 session 1 (46:32 long) Pupils contribute to definition

12:06	1	TA	ok next one:: c:oa <u>l</u> c:oa <u>l</u>
	2	C2	whats coal? <i>looks at TA</i>
	3	TA	coal what you put on a f[ire
	4	C6	[ire (.) <i>looks at TA</i>
→	5	C3	all those [little black blocks <i>looking at TA</i>
	6	TA	[it burns and gives out heat thats right
→	7	C6	and turns a bit white <i>looking at TA</i>
	8	TA	it does and red

The repair initiation from C2 in line 2 regarding the meaning of the word ‘coal’ is clearly directed at the TA (they look directly at her following it). Consistent across the data is that pupils are confident to query vocabulary, and always direct these queries to the TA. The TA provides the repair ‘what you put on a fire’. C6 first joins the completion of the word ‘fire’, joining the interaction but not adding anything additional. The TA adds additional information ‘it burns and gives out heat’ which is built on by C6 with ‘and turns a bit white’ (line 7) and then again by the TA: ‘it does and red’ (line 8). The TA’s additional information in line 5 overlaps another contribution from C3 which builds the explanation ‘all those little black blocks’, something which the TA acknowledges in line 6. The explanation of the word ‘coal’ has therefore been constructed by the TA with two other pupils in the group. However, both these pupils are clearly directing their contributions to the TA rather than to the pupil who asked the question (they look at the TA each time). They also build on the TA’s prior turn rather than each others. The only times when pupils attempt to build explanations of words directly with other pupils in the group is when the TA does not take up the question and is engaged in another activity, as in the following extract.

The group have reconstructed a letter from strips of paper with individual sentences printed on them. The TA is now writing each sentence on the board.

Extract 48 from case 7 session 3 (31:27 long) Pupils attempt to build definition

27:54	1	TA	so that will be <i>writing on board</i>
	2	C3	what does penfriend mea:n?
		TA	<i>writing on board continued</i>
	3	TA	its hang on <i>writing on board continued</i>
	4	C2	() does something mean
		TA	<i>writing on board continued</i>
→	5	C1	that means that you are his friend foreve::r
		TA	<i>writing on board continued.....</i>
→	6	C3	no it didn’t
		TA	<i>writing on board continued</i>
	7	C1	yeah
		TA	<i>writing on board continued</i>
	8	C3	you can’t be friends forever (.) you can if you want but sometimes you (can’t)
		TA	<i>writing on board continued.....</i>
	9	TA	right lets read it will you be my penfriend

The vocabulary check by C3 in line 2 ('what does penfriend mean?') begins to be answered by the TA 'its' but is then broken off while she focuses on writing the sentence on the board (indicated by the verbal direction 'hold on' in line 3). Whilst the TA continues to write C1 provides a candidate answer 'that means that you are his friend forev::er' (line 5). This is rejected by C3 (line 6) who, when C1 reinforces their position (line 7) provides the reason for the rejection in line 8 ('you can't be friends forever', then changed to 'you can if you want but sometimes you (can't)'). Whereas across the data no explanation provided by the TA is rejected by the pupil asking the question, this does occur when pupils are engaged in providing explanations for each other. This suggests that the TA is considered to be the one who provides the 'correct' answer. In the case of this activity an agreed explanation of the word 'penfriend' is never established; the TA does not provide the explanation herself that was promised in line 3, and has not intervened in the interaction between the two pupils to prevent a misconception developing.

In relation to vocabulary extension, a number of points are clear from the analysis. Firstly, pupils are able to co-construct explanations of vocabulary items with a TA, although this is not initiated by the TA, and the pupils respond to her contributions (and not to each other). This is consistent with the findings of Skidmore, Perez-Parent and Arnfield (2003) that pupils working in small groups with a teacher do not engage in pupil to pupil dialogue. Secondly, pupils see the TA as the holder of the correct answers. Thirdly, pupils are not necessarily able to co construct accurate explanations (this is possibly exacerbated over time by the first two points) and their attempts therefore need to be monitored and supported. These findings would also support those of Radford, Blatchford and Webster (2011) that TAs do not see their role as exploring students' understandings.

6.6.2 Extending single word answers in the follow up turn

There are a number of examples in the data of pupils being asked a comprehension question and giving a single word response (often questions are formulated in such a way that the correct answer is a single word). The TA then extends the topic in the follow up turn to provide the explanation for this answer. In the following example the TA provides a detailed description of the picture in the book to extend the topic.

The group are discussing the pictures in the book ‘The washing day’.

Extract 49 from case study 4 session 1 (23:12 long) TA expands pupil response

09:32	1	TA	<u>now</u> is look at mummys face do you think mummys getting cross?
	2	C5	(I want to see)
	3	C1	yeah <i>hand half up</i>
→	4	TA	I think she is I think shes getting a little bit cross shes got the shes got the doggy in the bath (.) shes got the ba:by pulling all the clothes out

In line 3 C1 provides the single word candidate answer ‘yeah’ to the question asked by the TA in line 1 ‘do you think mummys getting cross?’. Despite the use of both ‘think’ and ‘you’, which suggests a focus on the pupil’s ideas, this type of turn is formulated in a way that seeks agreement (Radford, Blatchford and Webster, 2011). Questions phrased in this way are likely to be responded to in the affirmative (in this case agreeing with the option given that mummy is getting cross). The pupils have also been referred to the picture clue ‘look at mummys face’. There is therefore a high level of support for the pupils in reaching the correct answer. In the follow up turn (line 4) the TA provides agreement with the candidate answer but then goes on to extend the topic by providing the reasons for this which involves describing the different parts of the picture: ‘shes got the doggy in the bath shes got the ba:by pulling all the clothes out’. A similar example follows, although in this case the explanation provided by the TA is not simply a description of the picture, but draws on the information gathered from the story so far (a higher level skill in terms of comprehension skills).

The group are taking it in turns to read a page each from the book ‘The computer game’

Extract 50 from case study 1 session 1 (40:22 long) TA expands pupil response, drawing on earlier information

32:00	1	C4	dad said come and help me pete <i>reading</i>
	2	TA	t oh d’you think petes getting a bit fed up now?
	3	C1	y:eah
	4	C3	nods
→	5	TA	cos he wants to play his game doesnt he and everybody keeps asking him to do something else

Again, the TA asks a question to which the answer can only be yes or no, but formulated in a way that seeks agreement. An agreement is received from both C1 (‘y:eah’) and C3 (who nods); in the follow up turn the TA then extends the topic,

providing the explanation for the observation ‘cos he wants to play his game doesnt he and everybody keeps asking him to do something else’ (line 5).

Consistent in the data is this tendency, particularly in activities involving reading; pupils are asked low level questions which require minimal answers (often only agreement), whereas TAs provide the higher level topic extension (of the sort that would answer a follow up question such as ‘how do you know that?’ or ‘why?’). This is much more common than pupils being encouraged to extend the topic themselves. Although this provides a model for the pupils of topical extension, it limits the opportunity for them to practise it themselves. This is consistent with the findings of Radford, Blatchford and Webster (2011) that TAs ask closed questions and do not pursue topic by encouraging pupils to elaborate and explain, thus limiting pupils’ active engagement (the same study found that teachers in whole class teaching situations use the feedback turn to open up the topic). Specifically in relation to teachers reading with groups of pupils it has been shown that there is a lack of use by teachers of high level scaffolding strategies (Pentimonti and Justice, 2010); the findings of this study is that the opposite is the case with TAs working with groups – there is a lack of low level scaffolding strategies which require pupils to draw more on their own resources.

6.7 Summary of results

It has been shown that the practices of TAs in relation to topic management (particularly topical pursuit and curtailment) can operate to:

- Focus on the production of predetermined end products;
- Close down opportunities for dialogic talk;
- Focus on modelling and vocabulary development;
- Reduce engagement with higher level academic and interactional skills.

The ways in which this occurs will now be summarised in relation to each specific practice analysed.

6.7.1 Use of topically irrelevant questions

Questions with a yes/no answer were found to be in use by TAs; sometimes these are presented in a format which encourages topical extension, and sometimes in a way which does not. In either case these are taken up by the pupils as genuine questions (in that they attempt to engage in extended topical pursuit). However, when this occurs TAs can be heard to be attempting to curtail topic rather than allowing the dialogic opportunities to develop. It becomes clear that the answers to these questions are considered as irrelevant by the TAs in relation to completing the task; either answer will move the task on and the reasoning behind the answer (the pupil's explanation) is not considered important. It is noted however that responses which provide a candidate answer (yes/no) first and then offer an explanation are more likely to be accepted than those which do not begin with this. It is concluded therefore that there is a strong focus on task completion by the TA, with valuable opportunities for dialogic talk being curtailed.

6.7.2 Checking contributions for topic relevance and appropriateness

Encouraging pupils to self assess whether a contribution is relevant to the topic is found to be a successful device. Pupils are heard to be able to do this, and it is likely to encourage self monitoring and therefore independence. However, it has also been demonstrated that TAs monitor the pursuit of pupil initiated topics, and that these can be curtailed by the TA (some specific 'triggers' in relation to TAs curtailing topic have been shown to be in place, including television programmes). The artefacts produced by pupils are also monitored by both TAs and pupils, and can be brought into the talk-in-interaction in order to begin the process of topic curtailment. There is evidence that pupils sometimes engage in checking procedures in order to prevent this happening. Finally, it has been shown that topics which are initiated by pupils may be 'held' in order to be pursued at a later point in the interaction. Overall, it is clear that the 'final say' in relation to topical pursuit and curtailment rests with the TA, although there are instances where pupils are given opportunities for self monitoring.

6.7.3 Narrowing the range of candidates accepted

It has been found that there are instances when pupils are encouraged to provide a number of candidate answers, whereas it becomes clear that there is a predetermined

final product which will be produced (in terms of both content and linguistic structure). Specific candidate answers are therefore selected by the TA, or inserted into the interaction, in order to achieve this product. Questions can therefore be taken up as genuine, but the topical pursuit is in fact highly structured by the TA towards a known answer. In some cases it has been shown that this known answer is one previously established with the group (in which case devices to draw pupils' attention to this would be more effective than encouraging a range of candidate answers). In other cases the answer is known only to the TA, as when a piece of shared writing is produced which appears to adhere to a predetermined format. In this latter case, pupils' responses are changed and shaped to the extent that it can be argued that there is a lack of the pupil's voice in the finished product.

6.7.4 Providing explanations

Pupils are confident in asking TAs for explanations in relation to vocabulary, and these are consistently provided by TAs. There are therefore numerous opportunities available in relation to pupils developing a wider vocabulary. There is less opportunity for pupils to engage in co-constructing vocabulary explanations with the TA or with each other. When provided with the opportunity they are able however to co construct successfully with a TA, although when pupils are forced into a position of having to co construct meaning for themselves they are less successful. This may be partly because they are drawing on limited resources as a group (as all of the pupils in an intervention group are likely to have weaker than average vocabulary skills). However, this may be compounded by the fact that pupils rely on the TA as the holder of the 'correct' knowledge and direct their contributions and queries to her rather than to each other.

Also explored has been the practice of explanations being provided by TAs which provide the kind of topical extension which pupils need to practise in relation to higher level comprehension questions. This offers a model for pupils, but does not allow them to practise these skills for themselves. Often, it has been shown, the contribution of pupils is restricted to agreeing with an observation by the TA, which is worded as a question but when using the structure 'do you think' followed by an observation always leads to an affirmative answer.

Chapter 7 Results: Topic - Over-cueing via visual and non-verbal practices

7.1 Introduction

In this chapter topic practices continue to be examined through the use of Conversation Analysis (CA) to analyse talk-in-interaction during literacy intervention sessions in relation to the following research questions:

- What visual and non-verbal cueing practices are used by teaching assistants (TAs) and pupils for the management of topic during literacy tasks?
- What are the implications of these practices for the moment-by-moment learning experience of pupils?

Specifically, this chapter will focus on the visual and non-verbal practices which operate to reduce the likelihood of troubles occurring.

7.2 Overview of results

It was found that the use of cueing and prompting between TAs and pupils can operate to reduce the initiation of genuine contributions from pupils and reduce the likelihood of trouble occurring. This in turn reduces the need for repair and the opportunities for scaffolding learning. Two ways of reducing trouble are discussed here:

1. The use of visual cueing.
2. The use of gesture and gaze.

In this chapter the word ‘cue’ is used in relation to information provided to pupils to support them in answering the question or completing the task. The word ‘clue’ (or prompt) is used when additional information is given to support the pupil and this provides direct information leading to the answer. All participants are found to be highly active in engaging in practices to reduce the likelihood of trouble. TAs provide answers, cues and prompts; pupils closely monitor TAs’ utterances and gestures for these, as well as engaging in practices individually and as a group which elicit these.

However, tasks can be presented by TAs in ways which create the impression of more independent challenge than there is (what might be termed ‘pseudo challenges’), and finished products treated as if they have been independently produced.

It will be shown that the use of practices to reduce the likelihood of trouble:

- Reduces the level of independent challenge for individual pupils;
- Reduces the opportunities for pupils to develop self supporting strategies;
- Can cause pupils to focus on the specific clue or hint rather than the wider learning point; and
- Can create additional troubles.

An overview of the spread of data in relation to over-cueing via visual and non-verbal practices can be found in Table 9. This shows how often the practices presented occurred in the data. N/A has been inserted where no independent writing activities were included in the sessions. Where data has not been provided for phenomena, this is because they are unique; they show a practice rather than suggesting it is general.

Table 9: Over-cueing via visual and non-verbal practices: overview of data

	Answers available to copy	Use of pointing to identify correct answer	Naming objects in pictures	Use of verbal cueing/prompting with gesture
Case 1	1	3	1	0
Case 2	N/A	1	8	0
Case 3	1	5	6	0
Case 4	N/A	2	5	2
Case 5	4	12	3	27
Case 6	4	14	3	23
Case 7	3	8	8	5
Case 8	1	3	4	3

7.3 The use of visual cueing

Visual cueing was found to be in use in the data when pupils are about to embark on an independent task. Pupils are given the sentence or word to copy, or are given written clues to support them in carrying out the task. In the first instance the tasks are not

presented in a way which suggests that they are challenging, and the value in terms of the learning experience might be questioned. In the second case the task is often presented in a way which suggests that there is an element of independent challenge involved, but the data shows that in these cases pupils use practices which support them in gaining the answers or high level support hints from the TA during the task. This limits their independent engagement in the task, and therefore has the potential to both limit their immediate learning experience and their opportunities to develop self supporting strategies.

In the following extract the word which the pupils are asked to write has been written on the whiteboard by one of the pupils, supported by the TA, during the modelling of how to use phonetic knowledge to write the word. When asked to write the word independently, the two pupils who were not involved in producing the word on the whiteboard copy the word rather than independently spelling it.

One pupil (C1) has been at the whiteboard working with the TA to write the word ‘help’ on the board. This is a key word from the text they will be reading later in the session. In this extract ‘whiteboard’ is used to describe the large shared whiteboard, and ‘board’ the individual whiteboards that the pupils are writing on.

Extract 51 from case 3 session 1 (37:58 long) pupils copy word from whiteboard

09:11	1	TA	well done I'd like you to write that on your board please
→	2	C3	<i>picks up pen, moves board towards her, looks at whiteboard, writes first letter</i>
→	3	C2	<i>picks up pen looks at whiteboard and writes first letter</i>
	4	C1	can we rub it out <i>rubbing action</i>
	5	TA	no you can write it on your board for me <i>giving board pen to C1</i>
	6	C1	<i>returns to seat</i>
→	7	C3	<i>looks up at whiteboard then writes second third and fourth letter</i>
	8	C1	can we write to a hundred (this) time
→	9	C2	<i>looks at whiteboard then writes second letter</i>
	10	TA	no you need to sit down [and write the word help for me <i>shakes head taps board</i>
→		C2	<i>[looks at whiteboard then writes third letter</i>
→	11	C2	<i>looks at whiteboard then writes fourth letter</i>
	12	C1	<i>sits down and starts writing</i>
	13	C3	<i>looks at TA and puts lid back on pen</i>
	14	TA	well done
	15	C1	there I'm done
	16	C3	I'm really good at this <i>smiles</i>
	17	TA	very good (inaudible)

The first indication that the pupils may be being given the opportunity to copy the word rather than spell it independently is in line 1 when the TA uses the article ‘that’ in the direction ‘I’d like you to write that on your board please’. The reference is to the word ‘help’ which has just been established as a shared topic for the group, but the word is also a physical object on the board. In lines 2 and 3 C3 and C2 both look at the whiteboard before writing the first letter. It would be possible that the TA had accidentally left the word on the board, but in this case it is likely that she would have responded to the two pupils copying from the board. Bearing in mind the small group size (three pupils) it is unlikely that she would not have noticed this. However, in line 4 C1 asks ‘can we rub it out’; the TA replies in line 5 ‘no you can write it on the board for me’, providing a clear indication that the word has not been left on the board accidentally. C3 and C2 continue to use the word on the board to prompt their own spelling, both using it to write the second letter (lines 7 and 9), and then C2 using it to write the third and fourth letters (lines 10 and 11). There is no evidence of either of them using any self supporting strategies (such as sounding out the letter) before doing this. The only pupil not to use the word on the whiteboard is C1, who was the pupil who received one to one input from the TA at the whiteboard to sound out and spell the word (to ‘rehearse’ his spelling). An interesting point is that C3 receives praise from the TA in line 14 (‘well done’) and in line 16 states ‘I’m really good at this’. This activity has therefore ensured that the task is completed correctly, and provided an opportunity for C3 to experience a sense of achievement. However, it lacks challenge as a learning experience – at no point was any cognitive demand placed on a pupil to attempt to spell the word independently.

Whereas in the previous example the task was not presented by the TA in a way which suggested any element of challenge, tasks are often presented in a ‘pseudo challenging’ way. In the following extract the pupils are provided by the TA with all the possible spellings for the phoneme /o/ which they will be underlining in the passage that they have been given. This is presented in a way that suggests that there is still an aspect of the task which is challenging for the group. It is shown, however, that the practices of both the TA and the pupils operate to reduce the challenge to one of lowest possible risk of not completing the task correctly.

The group have been given a passage of text. The task is to underline the words containing the phoneme /o/ which is spelt in a number of different ways (a task regularly carried out with each phoneme covered).

Extract 52 from case study 6 session 1 (48:52 long) TA gives answers and pupils check they have them

11:40	1	TA	right ok now lets write dow:n o w <i>looking at lesson plan</i>
	2	C4	o w
	3	TA	o e
	4	C4	o e
	5	C1	o
	6	TA	o
	7	C4	o
	8	C2	o
	9	C5	o
	10	TA	split digraph can you write it down without telling me what it is=
	11	C3	=o something e
	12	TA	uh <u>d</u> Steve write it down without [telling me
	13	C3	[but I know
	14	TA	write it down=
	15	C3	=its two
	16	C2	o something e
	17	TA	yep thats it
	18	C3	and theres (angle)
	19	TA	an:: [d
	20	C2	[o
	21	TA	o a
	22	C2	o a?
	23	TA	mhu
	24	C3	yep
→	25	TA	and theres lots to look out for [dont forge:t I may have ↑tricked ↑you and not told you all of them because its your work not mi [:ne ok
	26	C1	[o something e? [o something e?
	27	TA	right are we [ready? are we steady?
	28	C?	[is it oa?
	29	C2	miss can you read them a [gain
	30	TA	[put those thinking caps on [lets get those thinking caps on straight <i>mimes putting a cap on</i>
→	31	C2	[is it o w is it o w o e o o something e and o a?
→	32	TA	yeah
	33	C2	ah <i>writes on paper</i>
	34	TA	right ok everybody got it?

The TA provides a clear instruction for the pupils to record the spellings of the phoneme /o/ ('lets write dow:n') which she begins to read from the lesson plan in line 1, and the pupils write these at the top of the paper that they have with the passage on (for ease of reading the writing actions of the pupils have been removed from the transcript, but all pupils are engaged in writing the graphemes down throughout). These might be

considered as ‘clues’ as the pupils will be asked to underline words in the passage which contain the phoneme /o/; however, they can also be considered as very closely related to the required answers, in that pupils would only need to search for the graphemes provided and underline the word which it is in. The first two spellings (ow and oe) are provided by the TA and are repeated by C4 as she writes them (line 2 and line 4). The next spelling (o) is provided by C1 first in line 5, but C4 only receipts (through repetition) the spelling once it has been receipted by the TA in line 6, suggesting that answers are only considered by the pupils to be ‘correct’ once validated by the TA. There is a change in line 10, as the TA asks the pupils to write down the next spelling by themselves. It would seem that the ‘without telling me what it is’ is designed to ensure that each pupil does genuinely have a try by themselves without any pupil ‘telling the answer’ to others. However, this is swiftly overridden in line 11 by C3 (‘o something e’). This draws a reminder from the TA in line 12 not to say it out loud, with the emphasised d in ‘uh d’ suggesting a correct answer has been given - that C3 has ‘given the game away’ to the group. This answer is repeated in line 16 by C2 (‘o something e’) and this time confirmed as correct by the TA in line 17 (‘yep thats it’). The practices of the pupils have therefore avoided the need for each member of the group to be individually assessed on their knowledge of the split digraph.

The final spelling of the phoneme is given by the TA in line 21, checked by C2 in line 22, and confirmed by the TA in line 23. Interestingly, an element of challenge is introduced by the TA in line 25; said in a light hearted manner (indicated by the raising intonation on the words ‘tricked you’), the suggestion is made that the pupils may not have been given all of the spellings of the phoneme /o/ to write at the top of their sheets. Whilst acknowledging that she has been giving them the answers this would appear to be a way of attempting to ensure that the pupils actively engage with the task, in case she has ‘tricked’ them, reinforced by the words ‘its your work not mine’. This prompts a number of queries from the pupils, checking that they have all of the items that the TA has given. Both C1 and C? check individual spellings in lines 26 and 28, neither of which is responded to by the TA. These are followed by a request from C2 (‘miss can you read them again’) demonstrating again that the TA is considered to be the one able to provide all of the answers; in this case the link has been made that she is reading them from the lesson plan. When this request is not responded to (the TA continues

with encouraging the pupils to be ready to start the task in line 30) C2 uses a different technique. This time she reads the spellings that she has written from her own sheet and asks for confirmation that this is the full set. This obtains from the TA both confirmation that this is the set of spellings and a check that all of the pupils have got these. Once again therefore the practices of the pupils in the group have ensured that they have all of the spellings that are required and will not be having to carry out the task without already having the answers that they need. The introduction of a ‘pseudo challenge’ is an interesting one however, disguising to a certain extent the amount of support which has been given, and is one which continues in this particular task. In the next extract more of these ‘pseudo challenges’ are introduced by the TA, whilst at the same time both the TA and the pupils display their awareness that they have already received the answers.

The group are underlining words in the passage that contain the phoneme /o/

Extract 53 from case study 6 session 1 (48:52 long) TA reinforces the need to check independently

14:17	1	TA	come on Adam
	2	C1	(millionth [check it])
→	3	TA	[dont forget dont just look at the word and think oh yeah thats got that those letters in it its got to be it cos it may not you need to sound out that wo[:rd]
→	4	C2	[thats what I did]
	5	TA	well DONT I've told you that one before Sarah you need to sound out the wor:d cos we could ↑trick ↑you
	6	C2	he was a [ll]
	7	TA	[sound it out]
	8	C2	alo:n [e]
	9	TA	[shh read it to your ↑self]
	10	C4	<i>hand up</i>
	11	TA	whats the matter Pr [iya?]
	12	C4	[if its got one and then a two two f and two letters in the middle right so if its o something e and its got two letters in the middle d'you=]
→	13	TA	=if its o something e it should be it shouldnt it sound the word out and see if you can hear that o::
	14		<i>pupils working on text for 4.0</i>
	15	C1	miss you know when its er toe can you do the o e
			<i>points at word looking down looks at TA</i>
	16		(0.8)
	17	C3	I ↓did=
→	18	TA	=well what did we say isnt o e down there I thought it was down there
			<i>looks down at lesson plan</i>
	19	C1	oh yeah it is
	20	TA	ohe:: yeah double check it now you've told everybody they're all scribbling

In line 3 the TA introduces a further pseudo challenge. In the previous extract it was suggested that she may not have given them all of the answers. This time there is an attempt to stop the pupils from just underlining all of the words which contain the spellings of /o/ that they have been given, but rather to sound out the word to ensure that the phoneme can be heard as an /o/ in the word. Whereas the response from C2 in line 4 ('thats what I did') could be interpreted as her stating that she did sound the words out, it is taken up by the TA in line 5 as an indication that she has underlined all of the words which have the spellings given, without sounding them out: 'well DONT I've told you that one before Sarah'. This suggests that this is a practice which has been noticed by the TA to be in use either specifically by C2 or by the group as a whole. There is reinforcement then of the pseudo challenge: 'you need to sound out the word cos we could ↑trick ↑you'. Again this is said in a light hearted, jokey way, whilst suggesting that the pupils need to engage with each word independently rather than relying on the answers they have been given. Interestingly however, when C2 sounds out the next word containing a spelling that they have been given in line 8 (therefore demonstrating her compliance with the TAs directions given in lines 3, 5 and 7 in increasingly specific ways, with the final direction being given to C2 in relation to the next word: 'sound it out') she is told not to do that out loud: 'shh read it to your↑self' (line 9). Therefore, the only way of checking that the pupils are sounding out the words rather than relying on the answers has been closed down by the TA herself.

Further evidence that the TA is reinforcing reliance on the answers provided is found in lines 12 to 20. In line 12 C4 queries a word; this word does not appear to fit the pattern 'o something e' which the pupils have been given as it is 'o something something e' (i.e. it has two letters separating the o and the e rather than one). This query is very quickly responded to by the TA with 'if its o something e it should be it shouldnt it', reinforcing the use of the answers provided. She does however follow this up with 'sound the word out and see if you can hear that o:::', thereby encouraging independent checking, although it could be argued that the use of the 'that o:::' confirms that the word contains this. There is another query in line 15 by C1 and the response from the TA this time directly relates to the answers provided at the beginning of the session; the words 'well what did we say isnt o e down there I thought it was down there' together with the action of looking down at the lesson plan reinforces the fact that the pupils have been given these. C1 then agrees that o e is on his list (line 19). This time the

pupil has not been explicitly encouraged to sound out the /o/ (although the direction ‘double check it’ could be interpreted as this) but simply referred to the list given. C1’s query is then taken up in an interesting way by the TA who suggests in line 20 that the pupils are now all copying an answer from him (‘now you’ve told everybody they’re all scribbling’), therefore drawing attention away from the answers being provided by her.

These extracts demonstrate that pupils are at times provided with answers visually by the TA which they only need to copy in order to complete the task. Sometimes, as in extract 3, this is done an open way, and praise given for completing the task by copying correctly. At other times (as in extracts 5 and 6) it is done in a way which appears to provide a greater level of independent challenge, but in actual fact is a ‘pseudo challenge’. In this case both the TA and the pupils engage in practices which ensure that the answers are available to the whole group, but the TA does this in a way that obscures this fact as far as possible.

7.4 The use of gesture and gaze

The data contain examples of extensive use of gesture by TAs, usually together with verbal elements, to provide answers or high level clues and prompts to pupils. This can be achieved through pointing at a particular word or picture in a resource being shared (conventional gesture) or refers to as ‘iconic gesture’ (a gesture which represents a concept). These gestures occur together with a closed question (often low level closed questions which relate to naming vocabulary items) or a Designedly Incomplete Utterance (DIU – which use elements of the learner’s previous turn to syntactically lead the learner to complete the utterance) (Radford, 2010b). This reduces the likelihood of trouble and the need for repair. It will be shown that pupils closely monitor and use TAs’ gestures when answering questions and completing tasks. They also use gesture as part of their own resources to respond to questions. However, as will be demonstrated, use of gesture relies on one or more of the following aspects in order to be successful:

- Precision of the gesture;
- The pupil’s vocabulary; and
- Links established between text and picture.

7.4.1 Gesture, gaze and written text

The conventional gesture of pointing can be used to draw attention to a specific word in a text. Generally this is as a prompt for another participant in the interaction to read the word being pointed at. However, when used in relation to a question it can also be used to draw attention to a word which is the answer or can operate as a clue to the answer. Extract 11 demonstrates the use of pointing by both the TA and the pupil in identifying a correct answer in the form of a word on a page in the shared resource of a book.

The pupils are finding rhyming words in the book 'Hairy MaClary from Donaldson's Dairy' which has been read to them.

Extract 54 from case 7 session 1 (32:21 long) Use of pointing to identify a correct answer

25:00 → 1	TA	how about here (.) whats rhyming words (.) with the spots what d'you think the word that rhymes with spots <i>points at word spots</i>
2	C4	spots
3	C3	s p o T s
4	TA	whats the rhyming word with spots?
5	C4	<i>hand up</i>
6	TA	yes Ashraf
7	C4	em <i>pointing</i>
→ 8	TA	which is the word that <i>running finger along top line and stopping at potts</i>
9	C4	tops tops <i>pointing</i>
→ 10	TA	what does it say <i>finger on the word potts</i>
11	C6	potts
12	C4	potts
13	TA	well done its potts

In line 1 the TA points at the word spots after saying 'how about here whats rhyming words with the spots what d'you think the word that rhymes with spots'. It appears that this is asking the pupils what word rhymes with the word spots given the evidence in line 4 when the TA asks 'whats the rhyming word with spots?'. In response to the initial utterance both C4 and C3 have focused on the word being pointed at (C4 says the word out loud in line 2, and C3 spells it out in line 3). Generally in the data when a TA is pointing to a word or picture the pupils are being expected to say the word or name the picture; this would explain why pupils respond by reading, then spelling the word rather than considering it to be supporting a question about another word in the text.

Once the TA has specifically asked what word rhymes with spots however, C4 points in the direction of the book, although it is not clear at this point which word she is pointing to. The TA then begins to ask the question again, in a slightly different form (line 8), with a change from ‘what’ to ‘which’, whilst moving her finger over the line containing the rhyming word and stopping on the word which rhymes (potts). C4 responds to the partial question ‘which is the word that’ specifically in relation to the moving finger and the word ‘which’ by pointing to where the finger has stopped, and saying ‘tops tops’ (line 9). The TA then asks the word to be read ‘what does it say’ at which point C6 reads the word ‘potts’, which is repeated by C4 (line 12). That the response is said by another pupil before it is repeated by C4 could indicate that she is able to recognise the word which rhymes but not read it (the spelling of the rhyming segment is sufficiently close (spots/potts) but not identical); recognition of patterns in words would be expected before they can be read. Gesture and directional language therefore play a key part in allowing the pupil to contribute to answering the question correctly.

The following extract however, demonstrates that pupils can come to rely on the gestures of TAs as a way to answer questions. Here, the gesture of a TA is used by a pupil as the main (unsuccessful) strategy for trying finding a word which is needed to complete the task. The strategy is unsuccessful because of the lack of precision of the gestures.

The group have been finding and underlining the words which contain the phoneme /o/ in a passage they have been given. C5 has given her paper to the TA to be checked.

Extract 55 from case study 6 session 1 (48:52 long) Lack of precision in gestures

16:21	1	TA	come on then you ↑triple checked it you havent cos I've [seen two straight away
	2	C5	[puts head on table
	3	C5	sits up
→	4	TA	reads through paragraph for 13.0 I can see three right near the end double gives paper back to C5
			check triple
	5	C5	starts to reread
	6	C2	finished
	7	TA	lets have a look
	8	C2	pushes paper across to TA
	9	C3	(inaudible) pushes paper towards TA
	10	TA	I can see one two three straight away (2.0) make sure you've done your title reading paper.....

11	C4	she's already checked that
	TA	<i>continues reading paper</i>
12	C3	no she hasnt
	TA	<i>continued reading paper</i>
13	TA	<i>continues to read for 5.0 four</i>
14	C2	mmm
15	C3	hhh <i>pulls paper back</i>
16	TA	theres [at least four there and its quite near the end you all seem to be making <i>pushes paper back to C2</i>
	C4	[<i>pushes paper towards TA</i> [the same mistake=
17	C5	[<i>puts pencil to lips</i>
→ 18	TA	= sound the words out sound the words out <i>puts pencil point on word, moves pencil above paper in large circular motion, taps pencil point back on word and takes pencil away</i>
→ 19	C5	:hhh <i>puts finger and pencil close to place where TA's pencil point was looking at text</i>
20	C1	[done triple checked it
	C5	[<i>keeps finger in place and moves pencil along underneath words on the line</i>
21	TA	[<i>checks the work of other pupils for 97.0</i>
	C5	[<i>keeps finger on the word while looking at the text for a further 34.0; takes finger off, continues to look at text while also glancing at other pupils and the TA</i>

Having established in line 1 that C5 has not completed the task, the TA provides verbal hints in line 4 which give both the number of words to be found and relates these spatially to the paragraph ('I can see three right near the end'). Whilst the TA is checking the work of other pupils in the group C5 finds two of the three words which she has missed. However, she is unable to find the third one, and gesture (putting her pencil to her lips in line 17) gains an additional hint from the TA. The verbal support provides a reminder of a general strategy; however, it is the gesture which is taken up by C5 as the key information for finding the answer. The pencil point starts and finishes in the same place on the page, although it circles a number of words during the action in between. It is the final tap of the pencil point on a word that is taken up by the pupil, with an audible intake of breath and the action of putting both her own pencil point and finger on the paper close together in an estimation of where the TA's pencil point was tapped (line 19). This would indicate that she sees the gesture by the TA as very specific (as the answer). However, it would appear that the word on which her finger is placed is not the word being sought (indicated by C5 then reading again along the whole line of text). For the next 97.0 seconds the TA checks the work of other pupils. For the first 34.0 seconds C5 keeps her finger on the same point on the page whilst looking at the text. The place where the TA tapped is therefore considered highly relevant as a marker of

where the correct answer is to be found. She then takes her finger off the text and spends the remainder of the time looking at the text and occasionally looking at other pupils and the TA, indicating that she has failed to find the word – either the tap of the TA’s pencil, or the placing of C5’s pencil in the estimated place, has not been accurate enough to locate the word.

The word that C5 is still looking for is ‘oh’. The following section of the transcript takes up the interaction at this point.

Extract 56 from case study 6 session 1 (48:52 long) Continued from extract 55

19:00	22	TA	be careful what you cross out I [want you to <u>sound out</u> the letters <u>read</u> the
		C5	[looks down at paper words [see if its got that <u>o</u> sound <u>o</u> sound
	23	C5	[looks at TA.....
→	24	TA	I can see it and I’m looking at it <u>o</u> : sound
		C5eyes follow TAs gaze to paper, turns head towards paper, then puts pencil point on a word and looks at TA
	25	TA	looks away from C5
	26	C5	takes pencil off paper
	27	C2	the o sound?
→	28	TA	the <u>o</u> : sound
	29	C5	oh I found it
	30	TA	o [o o sou:nd
	31	C5	[thank you smiles

There is a look towards the TA by C5 in line 23, indicating that more support is required in finding the answer. This is responded to by the TA in line 24 with two hints. One is again responded to by C5 as a general support (‘o: sound’), with the other clue ‘I’m looking at it’ taken up as the more specific clue, and therefore the more useful. C5 therefore follows the direction of the gaze of the TA, turning her head towards the paper, and puts her pencil on a word, looking at the TA for feedback (line 24). However, the TA looks away in line 25, which is taken by C5 as an indication that she has not found the correct word and she therefore takes her pencil off the paper in line 26. Once again, either the gaze itself, or the estimation by C5 of the end point of the gaze, is not accurate enough to locate the word. Following line 28 when the TA again emphasises the phoneme /o/ the word is located by C5 (the emphasis on the o was actually the word itself as the ‘oh’ of the word is identical in sound) and the task is completed.

Throughout this task the TA’s gestures have been relied upon by C5 as the main strategy. This may be because the most common use of gesture in the form of pointing

is to locate a specific item for pupils to read or name. In this example, either the TA's pointing and gaze were not accurate enough (which could be a deliberate strategy to introduce an element of challenge) or the pupil's estimation of the end point of the pointing and gaze was not accurate enough. In either case it is clear that the use of the TA's gesture in relation to locating answers within a text is seen as a high level support strategy by the pupil (i.e. very likely to lead indicate the correct answer) and the data suggests that pupils can become dependent on this.

7.4.3 Gesture and pictures

When used in activities which involve talking about the pictures in books, gesture in the form of pointing is used to indicate an item which the pupils then name. As this is a relatively low level skill (in relation to the complex skills of reading and comprehension) this in itself reduces the likelihood of trouble. In the following example, gesture is used to indicate each picture of an animal to be named on the page. As the same animals appear throughout the book, in both pictures and text, the identification of the animals can potentially reduce the likelihood of trouble for the pupil when reading the text. However, establishing the connection between picture and text is not always achieved effectively.

The group are talking about the pictures in the book 'Not me said the monkey'. On the previous page they have named all the animals on the page.

Extract 57 from case study 2 session 2 (26:36 long) TA asks pupils to name items pointed at

17:40	1	TA	right in this picture this is coming on from the one we looked at before the <i>turns book round to the group</i> elephant hasn't turned round so the elephant doesn't know who it is does he so he's thinking it could be <i>points at picture</i> the: (2.0) what's this?
→			
→	2	C2	tiger
	3	TA	not a tiger what is it
	4	C1	l[lion
	5	Group	[lion
	6	TA	<i>nods</i> it could be the lion it could be the <i>moves finger to picture of a rhino</i>
	7	C2	rhinoceros
	8	TA	rhinoceros or it could be the <i>moves finger to the picture of a snake</i>
	9	C1	[snake
		C2	[snake
	10	TA	so [all these other animals are thinking oh no we're going to get the blame for this <i>[moves hand over page around the animals]</i>

The pupils have named all of the animals who appear on the page when looking at the previous page (as indicated by the TA in line 1). The word lion and the picture has appeared in the book a number of times, and individual pupils in the group have named the animals that they can see on other pages. Towards the end of line 1 the TA uses a DIU which can be completed by the pupils naming the animals on the page ('it could be' together with a pointing gesture, and then the next word in the DIU, with a stretched final sound, 'the:'). None of the pupils in the group complete the DIU and therefore the TA finally asks 'whats this'. C2 offers a candidate answer ('tiger') which is rejected by the TA ('not a tiger') and is corrected by C1 as 'lion', with the remainder of the group joining in after the initial l sound. The TA then continues with DIUs, with the pupils naming the animals as she points to them. The pursuit of topic is highly structured by the TA, who selects each item to be named; the pupils only need therefore to deal with one item (character in the book) at a time. Although the naming of the animals has the potential to support the reading of the book, the response 'tiger' in line 2 suggests that C2 at least is not making connections between the pictures in the text (as the lion has appeared and been named by either the TA or the individual pupils in the group on four previous pages). The question 'what's this' seems to prompt an individual response to that particular picture. Another interesting point to note is that the pupils and the TA use the word rhinoceros (this animal was identified by looking at a picture on a previous page), whereas the text has the word 'rhino'. There is therefore evidence that the TA and the pupils are not making specific connections between the text and the pictures at this point, thereby limiting sustained topical pursuit. This raises questions about the point at which it is helpful to make these connections – drawing attention to the word lion in the text would have the potential to support C2 with subsequent pages, and drawing attention to rhino as a shortened version of rhinoceros would also have the potential to support more accurate reading of the text.

It seems that the TA is primarily focusing the pupils on engaging with the picture clues rather than the text as a first strategy. Even when developing engagement with the picture, the TA draws attention to specific objects, rather than the meaning of the picture as a whole. In the following example, the question being asked about the picture has a phrase added which encourages the pupils to look at a specific object. The pupils then engage with naming the object, and the TA answers the higher level question which was asked.

One pupil has just finished reading a page of the book ‘The computer game’.

Extract 58 from case study 1 session 1 (40:22 long) TA focuses pupils on specific items rather than the big picture

29:20 →1	TA	well done what does mum look like she’s ↑doing she’s got something in her hand hasnt she
2	C2	<i>hand half up</i>
3	TA	Eamon?
4	C2	shes got a handkerchief
→5	TA	you think its a handkerchief?
6	C3	no its a cloth
7	C1	miss Allen [its a cloth <i>shaking head and looking at TA</i>
8	TA	[what do you th yeah I think shes been cleaning dont you <i>looks at C1</i>
9	C3	mmm yeah=
→10	TA	=because her mum or (.)[whoever coming to visit
11	C1	[look shes got that thing on <i>pointing at picture</i>
12	TA	yeah shes got her apron on as well hasn’t she
13	C4	yeah shes kind
14	C3	pete <i>reading</i>
15	TA	mmm

The question in line 1 (‘what does mum look like she’s ↑doing’) requires a consideration of the picture (and/or the story so far) as a whole. However, the TA then adds a phrase which focuses the pupils on one specific object in the picture: ‘she’s got something in her hand hasnt she’. This, rather than the question, is taken up by C2 who names it as ‘a handkerchief’ (line 4). This is corrected by both C3 and C1 (lines 6 and 7) and the topic is then taken up by the TA, who answers the question that she originally asked in line 8 (‘I think she’s been cleaning don’t you’) and links it to the text ‘because her mum or (.) whoever coming to visit’ (the group have previously read in the text that grandma is coming). Once this topic is established, C1, supported by the TA in terms of vocabulary, is able to add further information (lines 11-12). The pupils are therefore engaged in naming individual objects in the picture (a low level skill, although with the opportunity to develop vocabulary), rather than considering the picture as a whole in relation to the text. This is instead done for them by the TA.

There is evidence that pupils are able to draw on the text and picture together however. This is demonstrated in the following example.

The group are talking about the pictures in the book ‘The washing day’.

Extract 59 from case study 2 session 1 (35:34 long) Pupil links picture and text unprompted

28:23	1	TA	whats the baby (1.0) whats the baby trying to get hold [of in that picture? <i>puts finger on picture</i>
		C5	[u::m
	2	C4	<i>hand up</i>
	3	TA	Colin whats the baby try=
	4	C5	=a film I would say
	5	TA	a film?
→	6	C6	l::ook <i>points to word book</i>
	7	TA	oh yes its telling you it says (.) book doesnt it the babys trying to get the book to read

The question asked by the TA in line 1 is one which should have one candidate answer (a book); this is indicated in the text. The TA points at the picture, indicating that the question can be answered by naming the picture being pointed at rather than reading the text. This potentially reduces the likelihood of trouble occurring (as the pupils have both the picture and the text to draw on when answering). However, it is clear from the interaction that the pupil C5 is drawing only on the picture clue for a candidate answer; the picture however, is not very clear as indicated by his hesitation in line 1 (‘u::m’) and the inclusion of ‘I would say’ in his candidate answer in line 4. The candidate answer is queried by the TA in line 5 (‘a film?’). Interestingly, rather than correcting C5 directly, C6 uses a gesture (pointing at the word book which is in a speech bubble) and the word ‘look’ to indicate where the correct answer can be found (line 6) which is then read out by the TA: ‘oh yes its telling you it says (.) book doesnt it’ (line 7). There are three key points here. Firstly, pictures do not necessarily reduce the likelihood of trouble occurring (and can in fact cause troubles) as objects are not always easily recognisable by the pupil. Secondly, there is evidence in this extract that C6 was certainly capable of using the text to answer the question. Thirdly, the TA does not display a previous knowledge of the link between the picture and text on this occasion.

7.4.3 Iconic gestures

In the data verbal clues and prompts and iconic gestures are provided together. The gesture can occur concurrently with the verbal clue; can start part way through the utterance and continue until the end; or can occur after the utterance. Extract 10 shows

the use of extensive verbal clueing and prompting together with the use of miming actions to support the pupils in finding rhyming words.

The activity is for pupils to say words which rhyme with the one given by the TA.

Extract 60 from case study 5 session 1 (46:32 long) TA uses verbal clueing and prompting together with miming

06:01	1	TA	right ok (.) lets do some rhyming words (.) have a little think what about <u>note</u> <i>looks at lesson plan</i>
	2	C4	<i>hand up</i>
	3	TA	[<u>note</u> <i>nods head at C4</i>
		C5	[<i>hand up</i>
	4	C4	boat
	5	TA	boat good u::m also ow I've got a really sore uha uha <i>strokes throat with hand</i>
	6	C2	[throat [<i>hand up</i>
		C5	[<i>hand up</i>
	7	TA	throat good u::m oh something really nice its white its cold we lick its [called [ice cream <i>mimes licking ice</i>
		C4	[<i>hand up</i> [ice cream
		C5	[<i>hand up</i> [ice cream
	8	TA	and whats it in its in a c <i>mimes holding cone</i>
	9	Group	co[ne
	10	TA	[cone yeah u:m if you were walking very fast it could be you str
	11	Group	str[ode
	12	TA	[stro:de across the playground (.) what was we doing last week we were <i>looks down at lesson plan</i>
			doi::ng
	13	C2	planning
	14	TA	we were do the str <i>mimes stroking arm of C5</i>
	15	T4	stroke
	16	Group	[stroke
		TA	[stroke thats right (.) erm lets think what about <u>uw</u> I wr <i>looks down at lesson plan</i> <i>picks up pen and mimes writing</i>
	17	Group	wrote
	18	C2	wrote
	19	C3	boat
	20	TA	oow its a bit chilly I think I'm gonna put my <i>mimes doing coat up</i>
	21	Group	coat
	22	TA	thats it (.) what does a boat do it fl <i>mimes waves with hand</i>
	23	Group	floats
	24	TA	floats thats it
	25	C3	boat float
	26	TA	oh whats that funny animal that likes got little horns <i>mimes horns on head</i>
	27	C4	rhino
	28	TA	likes grass rides rhymes with note makes a funny err bleating noise
	29	C1	goat
	30	TA	goat good well done

In line 1 the TA asks the pupils to ‘have a little think what about note’, already having indicated that they are going to ‘do some rhyming words’. This is sufficient for two pupils to bid to provide a response, and a correct candidate answer (‘boat’) is provided by C4. Although this suggests that there are pupils in the group who are capable of providing candidate answers without additional clues, the TA acknowledges the answer boat as correct but then immediately provides a verbal clue in the form of a DIU: ‘u::m also ow I’ve got a really sore uha uha’ and visual prompt (stroking her throat). This leads to the identification of this specific answer by C2. It would seem from lines 1, 12 and 16 (when the TA looks down at the lesson plan) that this practice is likely to be related to ensuring coverage of all of the words listed on the lesson plan. Rather than allowing pupils to come up with their own rhyming words, and then extending the list, the practice reduces the autonomy of the pupils in the group. This pattern generally continues with the TA acknowledging the specific answer, followed by another verbal clue and gesture. A study by Radford (2010a) which focused on repair sequences, demonstrated that DIUs and gesture are both associated with repair sequences, with gesture appearing first, then an additional verbal device added. The gesture alone causes the pupil to draw more on their own resources. However, in relation to initiations in these data, the higher level verbal support occurs either concurrently with the gesture (as in line 20), begins part way through the utterance (as in line 7) or after the DIU (line 8). Therefore the higher level verbal support is provided first or alongside. In addition, the DIU often also includes a phonological clue (the beginning of the correct candidate answer), for example: ‘what does a boat do it fl’ (line 22). The pupils are therefore provided with very high level of support, minimising the extent to which they have to draw on their own resources.

These practices also affect the way that pupils engage with the task. In this case, rather than focusing on the rhyming aspect, there is evidence that the pupils are focused on the clues. For example, in line 27 C4 offers the candidate answer ‘rhino’ to the question ‘whats that funny animal that likes got little horns’ and the mime of horns. The TA then provides more clues, but the key learning point (the rhyming /o/ phoneme) is embedded in the middle of the clues: ‘likes grass rides rhymes with note makes a funny err bleating noise’ (emphasis added).

7.5 Summary of results

It was found that the interactions between TAs and pupils can operate to reduce the likelihood of trouble occurring, thereby reducing the need for repair. Two ways of reducing trouble were considered:

1. The use of visual cueing.
2. The use of gesture and gaze.

The findings of each of these will now be summarised and it will be argued that these practices:

- Reduce the level of independent challenge for individual pupils;
- Reduce the opportunities for pupils to develop self-scaffolding strategies (Holton and Clarke, 2006);
- Can cause pupils to focus on the specific clue or hint rather than the wider learning point; and
- Can create additional troubles.

7.5.1 The use of visual cueing

It was found that there are instances where pupils are allowed to simply copy an answer rather than produce it independently. Although it can be argued that this provides a model for the pupils, it can be questioned how helpful this is in developing pupils' understanding as it does not require them to actively engage with the task. In the extract presented, the only pupil who attempted to write the word independently was the pupil who actively engaged with producing the model on the board; the other two pupils copied the word. Therefore, there is evidence that pupils who are not engaged with modelling with the TA are not actively engaged with the learning experience. Allowing pupils to then copy from the board is likely to compound this issue, as it reinforces a lack of need to actively engage; there is clear evidence that TAs are allowing this passivity to develop not only by allowing copying but expecting it.

It was also found that TAs and pupils engage in practices which define tasks in a 'pseudo challenging' way (as if pupils were independently actively engaged), whilst providing pupils with the answers (or very high level clues). Verbal devices are used by the TA to signal the need to actively engage, and to direct pupils to not provide answers to other pupils. At the same time, the TA engages in the practice of providing answers, and pupils engage in practices which elicit these answers, thereby minimising the need for individual active engagement.

In summary, both TAs and pupils use practices to ensure that answers and high level clues are provided in a written form, thus reducing the likelihood of trouble.

7.5.2 The use of gesture and gaze

In relation to gesture and written texts, the conventional gesture of pointing (with a finger and with an object, including tapping) was explored in relation to written texts. Gaze (or cueing with the eyes by looking at the object which could be pointed at) was also included in this. It was found that this device is used by both TAs and pupils to indicate a specific word in a text, and that all participants expect there to be a direct correspondence between the gesture and the topic item being pursued. Directional language and verbal clues and hints may be used alongside the gesture. However, the use of pointing can cause troubles when the gesture is not accurate, or when it is used to indicate a word linked to the item being sought or the general area of the item being sought rather than the item itself. It was found that this is because pupils rely on the gesture primarily, rather than drawing on their own resources.

In relation to gesture and picture it was found that pointing is used (in conjunction with a DIU) as a request for pupils to name the object being pointed at. A verbal device can also be used to indicate an object in the picture for pupils to name (a closed question), thereby requiring pupils to locate an object in the picture for themselves. These practices have the potential to develop vocabulary (as the TA can initiate repair in relation to any objects incorrectly named). However, they do not allow pupils to engage with more complex topical pursuits. Instead, there is evidence that this is carried out by the TA. In addition, whilst it might be expected that engagement with the pictures which appear alongside a written text would reduce the likelihood of trouble when engaging with the text itself, it has been shown that it does not necessarily support the

reading or comprehension of the text. Examples have been explored where it is clear that pupils are focused on each specific part of the picture separately and this reduces sustained topical pursuit and picture/text linkage. There is evidence that at least some pupils are capable of drawing on written text and picture together, but are not encouraged to do this (perhaps because a lack of detailed knowledge of the text by the TA). These practices are less likely therefore to support the independent development of higher level reading skills (which would require a consideration of the picture/text as a whole and the ongoing pursuit of topic).

In relation to the use of iconic gesture, these were found to be in use in conjunction with verbal devices such as DIUs and phonological clues. Gestures were not used in isolation to provide clues. Pupils are therefore being given the highest level of clueing (verbal followed by gesture, or verbal alongside gesture) which results in few troubles occurring. Where troubles do occur, these appear related to the focus of the pupil being on the clues themselves rather than the wider learning aspect of the task. This is despite there being evidence that pupils are able to independently generate at least some of the words required to meet the needs of the task.

In summary, gesture is used to support pupils in answering closed questions and completing DIUs. It can then support the development of vocabulary. However, there is evidence that it can limit the autonomy of the learner and the level of challenge.

Chapter 8: Discussion and implications

8.1 Introduction

This chapter will first draw together the findings from the analysis of interactions between teaching assistants (TAs) and groups of pupils during literacy intervention sessions in relation to the study's first aim: To explore the moment-by-moment interactions between TAs and pupils during literacy intervention sessions in order to develop theory in this area.

It will then draw out the implications of this, in order to make recommendations for policy and practice (aim 2 of the study). Although it is argued that practice, training, management and policy are interlinked, the first will be discussed in relation to the individual aspects of talk-in-interaction studied (turn-taking, repair and topic) as there are specific implications for each aspect. Training, management and policy will then be discussed in a more generalised way, as the implications from the findings in relation to the different interactional areas studied overlap significantly in relation to these.

8.2 Developing theory

It has been shown that TAs are engaged in pedagogical decision making on a moment-by-moment basis during interactions with pupils. As suggested by Seedhouse (2010) the 'task-in-progress' involves small variables which cannot be predicted in advance and are responded to in the moment by TAs; they are always involved in what he terms 'actual pedagogy' (in addition to the planned pedagogy). It has also been shown that these interactions are strongly focused on the organisational principles of the task and task completion rather than developing the learning experience, particularly during whole group interactions.

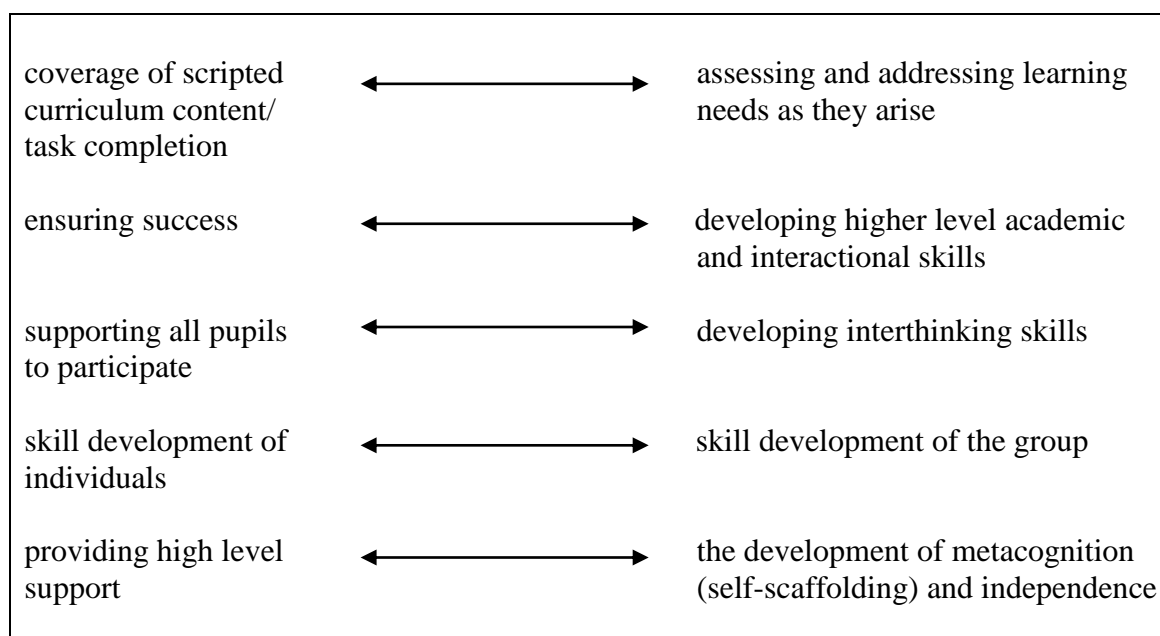
There are a number of key interlocking findings which contribute to a developing theory of the interactions between TAs and pupils in literacy intervention sessions:

1. Low level repair strategies (including correction) are commonly used by TAs.
2. Take up of repair by the individual pupil is not always provided for or monitored in the sequences of interaction which follow the repair.

3. Individual pupils often do not orient to the moments of discourse that have learning potential which are being explored with other pupils in the group.
4. Interactions tend to focus on the task and end products rather than the learning experience.
5. TAs closely monitor and control topic.
6. Opportunities for dialogic talk are routinely closed down.
7. Pupils are over supported through the use of non-verbal clueing and gesture.
8. Pupils are over reliant on cueing by TAs.

This thesis is significant in that it has developed a framework for examining the constant tensions which TAs are working with during literacy intervention sessions. These are shown in Figure 2.

Figure 2: Pedagogical tensions



If each of the above is viewed as a continuum, it is argued that interactions between TAs and pupils during literacy intervention sessions tend towards the left of the continuum. Both interactional and learning difficulties can arise from these tensions as

they are displayed in the talk-in-interaction of the participants. In line with findings from mathematics sessions (Radford, Blatchford and Webster, 2011), TAs as ‘deliverers’ of literacy sessions focus on task completion, providing high levels of support in relation to the individual difficulties experienced by members of the group; the ‘handover’ (Bruner, 1983) or ‘fading’ (Wood and Wood, 1996) of the responsibility for task completion is generally lacking. This may allow pupils to participate fully and to experience success (important in relation to developing confidence of pupils who are falling behind in literacy). However, considering the types of scaffolding suggested by Holton and Clarke (2006), pupils are potentially remaining dependent on the adult, not taking over responsibility for task completion (during expert scaffolding), and also not developing the interactional and metacognitive skills required to use other pupils as a learning resource (reciprocal scaffolding) and to self monitor and self repair troubles (self-scaffolding). Pupils therefore become reliant on an adult supplying corrections and high levels of support.

Each aspect of interaction which has been considered in depth is now discussed in relation to the developing theory and implications for practice. Research question 4 (What are the implications of these practices for the moment-by-moment learning experience of pupils?) is covered throughout each section.

8.2.1 Turn taking

Research question 1 asked ‘How is turn bidding and turn selection organised during literacy intervention sessions?’ It is argued that there are two ways in which turn taking is oriented to by participants:

- 1) As an overarching organisational principle in relation to the task (or activity type) being undertaken.
- 2) As a way of organising sequences of talk between participants on a turn by turn basis during the task (for example, to repair troubles or scaffold learning).

One way relates to the organisational principle *of* the task, the other to the ways of organising the turn by turn sequences of talk between participants *during* the task. It could be argued that this is similar to the concept of ‘floors’ suggested by Jones and Thornborrow (2004). The learning opportunities for individual pupils and for the group

as a whole are likely to be maximised when all participants are fully oriented to the relevant aspect(s) at the appropriate times in the interaction. However, this relies on all participants understanding that there are two organisational principles in operation, and having the interactional skills to orient to and move between the two. TAs and pupils do not always fully orient to one or other of these, or orient to the same aspect at the same time. It was found that TAs strongly orient to the organisational principle of the task rather than the turn by turn sequences of talk (where the scaffolding of learning could occur). It was also found that pupils do not always orient to the individual moment-by-moment interactions between TAs and other pupils within the activity structure turns.

Therefore, consideration needs to be given to both these aspects both during the planning of each activity within an intervention session (in relation to the overarching principle) and during the activity (in relation to the turn by turn interactions). This will now be discussed under the following broad headings:

- Matching task and turn organisation;
- Engaging all pupils in moment-by-moment turn taking.

8.2.1.1 Matching task and turn organisation

Although not limited to these, two specific organisations have been found to be in common use:

- a) Sequential turn selection (each pupil is selected in turn, sequentially around the group, usually from left to right as the TA looks at the group); and
- b) Competitive turn bidding (pupils raise their hand to bid for a turn and the TA selects the next speaker).

Deciding on the turn taking organisation to employ can affect the learning experience of the group as a whole and of individuals.

a) Sequential turn selection

Discussed here are the key considerations in relation to planning sequential turn selection as the overarching organisation principle for a task. Two types of activity will be used: book reading (pupils read a page each at a time); and oral discussion (pupils contribute their experiences or opinions).

For book reading, sequential turn selection would potentially allow the TA to support the comprehension of the whole group through devices such as recapping and explanation. It also offers pupils the opportunity to learn from the expert scaffolding of the TA of other pupils' reading errors; this however relies on the active engagement of all pupils with each sequential turn. Potential issues however are that pupils have to read at the pace of the group, and may not share the same reading difficulties as those picked up by the TA with other individuals (although this likelihood is reduced due to the selective nature of intervention groups). One further point to note is that the adult led guided reading strategy used in schools (introduced by the Primary National Strategy) advocates discussing the story and challenging vocabulary at the beginning and end as a group, but then asking each individual pupil to read independently at their own pace as the adult hears each pupil read aloud in turn (Primary National Strategy, 2003). There may therefore be a mismatch between the ways in which pupils are expected to engage with this type of activity in and out of the classroom.

The advantages of sequential turn selection for oral discussion activities is that it allows all pupils to contribute to the discussion, which may support pupils who are less confident and overcome some of the relational factors which affect pupils' interactions. This may be of particular importance for pupils who are falling behind their peers in literacy; participating in offering their opinions and ideas to a small supportive group may be less threatening than attempting this in a whole class situation. However, sequential turn selection in discussion activities has a very significant disadvantage. Rather than supporting pupil to pupil talk and dialogic talk which builds on previous contributions, sequential turn selection has a 'flat structure' – that is, each contribution relates back only to the first question asked. It is also likely to lead to a lack of engagement by pupils with the turns of others as there is no incentive to actively listen (in mundane conversation active listening is necessary in order to 'come in' at the end of a TCU). This lack of engagement with the turns of others has also been found by

Radford, Ireson and Mahon (2006) to cause difficulties in relation to circle time activities.

b) Using competitive turn bidding

In relation to some activities it can be argued that this arrangement is appropriate.

Activities requiring short comprehension answers or attempts to spell a word perhaps suit this type of bidding as it allows the pupil to decide whether they are able to attempt an answer (i.e. to have some sense of autonomy). It also allows for immediate evaluative feedback. Bearing in mind that this is the prevalent turn organisation found in whole class situations, it may also support pupils in developing confidence in bidding to answer questions. However, there is also evidence to show that pupils can disengage from the ongoing interaction when they bid.

8.2.1.2 Engaging all pupils in moment-by-moment turn taking

One key practice found which creates interactional troubles is **sustained and unacknowledged turn bidding**. Pupils who bid for a turn when they hear an undirected question (Walsh and Sattes, 2005) end their bids when:

- The next turn selection has occurred (when the TA has nominated the pupil to respond to the question heard);
- When the next turn has been completed (when the pupil nominated has responded to the question heard) ; or
- When the next turn is completed and a feedback move from the TA has indicated it is the response being sought.

However, there are times when none of the above actions take place. This can be termed sustained and unacknowledged turn bidding.

When sustained and unacknowledged turn bidding occurs, it is argued that the TA and the pupil are oriented to different activities. The pupil remains oriented to the point in the interaction at which the bid occurred; therefore if selected at a later point to contribute, the contribution is pragmatically inappropriate. It would therefore seem appropriate for TAs to more actively look for pupils displaying these behaviours, in

order to support the pupil in re-orienting to the ongoing interaction (for example, by asking them to put their hand down).

Neither sequential turn taking nor turn bidding allow for pupil to pupil talk as part of the overarching organisation. Maximising the active engagement of an individual in a learning activity can be supported by using turn taking organisations which require the individual to monitor the ongoing interaction in order to be able to contribute at a relevant point. Alternate turn taking organisations are possible, which would lend themselves more to this; these would be organisations which match more closely those of mundane conversation (i.e. allow pupils to self select and pupil selecting next speaker). The small group size involved in intervention sessions is likely to make this more possible.

It is clear that whichever turn organisation is employed, TAs focus on one to one teaching and learning interactions with the pupil whose turn it is rather than actively engaging other pupils in the group in the learning episode. In fact, TAs are active in ensuring that other pupils do not participate (by ignoring or rejecting bids from others). It has been shown that it is not enough for TAs to reinforce interactional rules in relation to activities. This does not ensure that all pupils in the group orient to the learning interactions occurring between the TA and individual pupils. All pupils could be encouraged to more actively orient to these interactions by having their attempted turns acknowledged and responded to – possibly by the TA, but also by the individual pupil whose turn it is. On a very practical level, TAs could be encouraged to actively look for the same troubles occurring (for example, different pupils having difficulties with the same word during reading) and use this as a group teaching point.

8.2.2 Repair strategies: Other Initiated Repair

Research question 2 asked ‘What repair practices are used by TAs and pupils when troubles arise?’ The decision was taken to focus on question-with-known-answer sequences, or activities which have a ‘correct’ response as these occurred most frequently in the data. It was found that TAs actively orient to troubles and opportunities to repair these (in line with Macbeth, 2004; McHoul, 1990; Radford, Ireson and Mahon, 2006). It was found that when repair is initiated by the TA, there is a strong tendency for high level support strategies and correction. Correction is the

main repair strategy used and is not held over a significant number of turns (although it can follow at least one repair attempt of another type). The evidence shows that one use of correction by TAs is as a way of moving on with the completion of the task. When and how correction is used affects the individual pupil and group's learning experience. This is particularly the case when considering reading and spelling activities which by their nature are likely to require more correction than activities which offer the opportunity for a number of possible candidate answers. Correction is least likely to promote learner independence (Radford, 2010b) and there is a case to be made for correction to be withheld more often and over a number of turns in order to develop metacognitive strategies and pupil to pupil talk. In addition, learning troubles can remain unresolved because of a focus on task completion rather than the repair and overlapping speech can be particularly problematic in this respect. There is often a lack of opportunity for orientation to the learning to be demonstrated by pupils through verbal repetition. This means that key moment-by-moment assessment information is being missed.

8.2.2.1 The use of correction

The time available for TAs to spend with pupils during literacy intervention sessions is limited, and therefore pedagogical decisions need to be made about balancing the learning needs of individuals with the learning focus for the group as a whole. It may be that a pedagogical case can be made for some words to be directly corrected; for example, when words are not high frequency words or are not the focus of the session. In this case it would be helpful for this to be built into planning (passages could be highlighted to indicate which words should be directly corrected and which should involve extended repair sequences which encourage OISR). In other cases TAs should persevere with OISR opportunities rather than routinely using correction after one repair attempt. In addition, practices need to encourage pupils to engage with the repair of the turns of others in the group. This would use the resources of the group (although these might be restricted due to the selection process for incorporating pupils in the group), encourage peer support and provide opportunities for pupils to develop reciprocal scaffolding skills.

8.2.2.2 Repeats

When corrections are made, the strongest evidence that it has been oriented to by the pupil would be found if the correction was repeated during a subsequent turn.

Therefore opportunities need to be provided to encourage a repetition turn within the routine structures of interactions. There is evidence of this occurring within reading opportunities (with pupils routinely repeating the word which has been corrected by the TA before continuing with the next word) but a routine repetition turn could be built into the interactions during other tasks – this could form part of the activity planning process. The repetition also needs to be monitored carefully to support accurate assessment of the extent to which learning points and repairs have been oriented to. This involves allowing the repetition to be completed – the avoidance of overlapping speech is particularly important here, and a simple change to practice which could be made.

8.2.3 Topic: topical pursuit, relevance and curtailment

Research question 3 asked ‘What practices are used by TAs and pupils for the management of topic during literacy tasks?’ The study of topic was split into two areas: practices related to topical pursuit, curtailment and relevance; and visual and non-verbal cueing practices. In relation to topical pursuit, curtailment and relevance a strong focus on modelling and vocabulary development was found. These are key elements of scaffolding the learning of pupils in literacy. Modelling is necessary in the early stages of pupils acquiring a new skill (Tharp and Gallimore, 1988; Wood, Bruner and Ross, 1976), and vocabulary development supports the development of reading comprehension skills. In particular, it is positive that pupils have been shown to be confident in querying vocabulary with TAs, which is to be encouraged and could be extended by supporting pupils in co-constructing definitions and exploring pupils’ understandings rather than simply supplying definitions. However, it has also been shown that the interaction between TAs and pupils in these sessions is generally focused on producing ‘correct’ end products, and the practices which are used to do this (the use of topically irrelevant questions; checking contributions for topic relevance and appropriateness; narrowing the range of candidates accepted; and providing explanations) reduce and close down the opportunities for dialogic talk. Pupils’ contributions are restricted to lower level inputs, and TAs supply the higher level

contributions. This both reduces the opportunities for pupils to practise higher level academic and interactional skills, and reduces pupil voice in the finished product. As discussed, this is likely to lead to pupils becoming overly dependent on adult support and to develop a view of learning as the ‘acquisition of procedures’ (Wood, 1988, p. 294). In addition, there is evidence that there can be a mismatch between the type of talk which is supported by the interactional organisation of a task and the type of talk which would best support the purpose of the task.

8.2.3.1 Planning the interactional organisation of the task

The interactional organisation needs to be planned in relation to each activity type/task, depending on the purpose of that activity. Two key purposes which would require different types of interaction are skills practice and topic generating/extending. Where the focus is on skills practice it is suggested that topically irrelevant questions (ones which generate topic contributions which are not going to be taken forward) are avoided. Instead, it would be more appropriate to work with pre-decided topics and formats. When the purpose is to generate or extend topic, dialogic talk would be more appropriate. This might include the use of talk partners, for example, to encourage pupil to pupil talk. It would also need to include the use of genuine questions by TAs and the use of follow up turns which open up pupils’ contributions by encouraging explanations and extensions (formulations such as ‘How do you know that?’ and ‘Why do you think that?’). It is important that the type of talk required is made transparent to all participants, as there is evidence that pupils will often respond in a dialogic way, which may cause difficulties when there is a specific answer required or topical pursuit is not desirable.

8.2.3.2 Topical relevance

There is a need to question the concept of ‘relevance’. There is evidence that topics which are linked to popular culture, such as television programmes, are closed down by TAs as soon as they are brought into the interaction by the pupil. Close control over topical relevance misses opportunities for pupils to draw on their own experiences and extend topics. It would be helpful however for each occurrence to be considered in relation to the ongoing topical pursuit. A reference to popular culture may be relevant in that it extends the topic. There is a need for TAs to identify whether a contribution (whatever the content) develops the topic rather than focusing on the specific subject of

that contribution. It is recommended that contributions are considered as not appropriate only if they do not operate in the pursuit of the ongoing topic. In relation to this, there is evidence that providing an opportunity for pupils to reflect on the appropriateness of their own contributions in relation to the ongoing topic can be helpful in developing pupils' understanding of relevance. Simply asking 'is this relevant to what we are talking about?' can prompt helpful reflection by the pupil. Discussion of what topical pursuit is, and support for pupils in identifying when their contributions are and are not relevant in relation to this would help support the development of higher level interactional skills.

8.2.3.3 Maintaining the voice of the pupil

Szymanski (2002) has demonstrated that teachers are able to guide pupils in 'doing answering' by taking the substantive content decided on and supporting them in producing a grammatically complete 'to be written down' sentence. The pupil's voice (in terms of substantive content) can then be retained, although the grammatical structure may be changed. This would be a helpful approach in maintaining the voice of the pupil in the final product whilst also supporting the development of literacy skills through scaffolded support to restructure contributions. Part of the planning process could be to decide where opportunities for pupils' own contributions to substantive content can be maximised. Also, it can be questioned whether compositions have to be 'correct' to be written down – learning might be developed by writing down the substantive content then adjusting with the pupils (therefore reducing the cognitive load but retaining the active engagement with the learning process). This would also have the added benefit of modelling editing and drafting processes.

8.2.4 Topic: over-cueing via visual and non-verbal practices

Although reducing the need for repair in mundane conversation is of paramount importance for all parties involved, in learning and teaching interactions the points at which troubles occur have the potential to support the accurate assessment of the pupil's current knowledge, skills and understanding. They also provide the opportunity for scaffolded support to be given to develop these. Therefore, it can be argued that interactions in which few troubles occur potentially offer a less rich learning experience. Although it is necessary for TAs to support and develop the confidence and motivation

of the pupils involved, achieving this through significantly reducing the likelihood of trouble also significantly reduces the opportunities for learning and for accurate assessment of each pupil. When analysing visual and non-verbal cueing practices, it was found that the interactions between TAs and pupils are characterised by over-cueing, thereby reducing the need for repair. All participants are found to be highly active in engaging in practices to reduce the likelihood of trouble. TAs provide answers, clues and hints; pupils closely monitored TAs' utterances, gestures and gaze for these, as well as engaging in practices individually and as a group which elicit these. This leads to a lack of active engagement with the learning point by individuals. These practices operate to reduce the level of independent challenge for individual pupils; and reduce the opportunities for pupils to develop self supporting strategies. They cause pupils to focus on the specific clue or hint rather than the wider learning point; and can create additional troubles. However, tasks can be presented by TAs in ways which create the impression of more independent challenge than there is (what might be termed 'pseudo challenges'), and finished products treated as if they have been independently produced.

8.2.4.1 Increasing the level of independent challenge

There is a need for the planning process to identify how tasks can be structured so that pupils are expected to actively engage; the use of copying for example should be very carefully considered in relation to the learning outcomes for the pupil (it might be appropriate for handwriting practice, but not when the focus is on developing spelling strategies for example). This requires careful assessment of where individuals/the group are in terms of the intended learning outcome, and a level of preparedness by the TA in relation to having additional support practices ready (such as providing some elements of the required information in the form of a clue) but used only as required. The pattern of 'if the child succeeds, offer less help when next intervening. If he fails, offer more help' (Wood and Middleton, 1975, p. 185) is a useful one to bear in mind here. Some 'levels' of support need to be considered at the planning stage, to allow TAs to draw on the relevant higher or lower level of support as required. For example, it can be considered whether pointing at a picture in a book when asking a question would be a high or low level support strategy (should it be a practice used routinely or only if pupils do not succeed in asking the question?). There is evidence that pupils can

become overly reliant on gesture and therefore it is recommended that this should be a practice used precisely and deliberately in relation to the level of challenge required. In relation specifically to reading comprehension, it is suggested that TAs need to consider more the links between the pictures and the texts when planning for teaching, and encourage pupils to make these links when engaged in topical pursuit. This involves having a thorough knowledge of the text. A focus on the pictures, although working on vocabulary development, does not support higher level comprehension skills. In addition, TAs need to be careful not to be drawn into over supporting pupils, as there is evidence that pupils engage in interactional practices which operate to elicit higher levels of support. Instead, it would be helpful to support pupils in asking the question ‘What do I do now?’ and developing independent answers to this, ensuring that prompts and clues are explicitly linked to the overall learning development point rather than simply solving the immediate issue. This would support pupils in generalising practices. Correctly completed tasks, without adequate liaison between TA and class teacher, are highly likely to lead to assumptions in relation to a pupil’s independent progress which are incorrect.

8.2.5 Conclusion

As discussed in chapter 2, it has been established that the impact of the work of TAs is an under researched area. However, the DISS project findings, and the Wider Pedagogical Role model developed from the project (summarised in Blatchford, Russell and Webster, 2012) has established the overall negative impact of TA support on pupil attainment and provided a framework with which to examine the factors contributing to these outcomes. One of these key factors is practice; in itself an under researched area in relation to the moment-by-moment interactions between TAs and pupils in any context, and without any existing research in the context of literacy intervention sessions. As outlined in the preceding sections, this thesis has developed theories of specific interactional practices in the areas of turn-taking, repair and topic which can be used as a starting point for examining interactions in similar circumstances (and may also be considered in relation to the interactions between TAs and pupils in other contexts). It has used these to clarify the factors which affect the pedagogical practice of TAs, offering a framework for examining these interactions more broadly (see Figure 2, page 200).

8.3 Implications for training, management and policy

It has been persuasively argued that there needs to be a fundamental rethink of policy in relation to whether TAs should have any pedagogical role, and that this needs to come before any changes to training and management (Webster *et al*, 2010b). However, bearing in mind the numbers of TAs in place, and the ingrained nature of the practice of using TAs in this way, the current discussion is based on the assumption that there is unlikely to be a wholesale change in the nature of the work of TAs. It therefore offers suggestions for training and management of TAs which require a new conceptualisation of the role but within existing frameworks. The implications of the study's findings for policy are then discussed in relation to both TAs and literacy intervention sessions.

8.3.1 Training

It has been established that learners are not currently supported to take responsibility for their learning, instead becoming reliant on adult support. Key to supporting pupils in becoming more independent is effective use of other-initiated repair which aims to hand over the responsibility for the repair to the learner, and develop metacognitive awareness (developing a range of answers to the question 'what do I do now?').

Developing the engagement of the learner with the learning interactions between others in a group is also essential so that individuals can draw on the support of peers and take up learning opportunities when adults are working with others in the group.

Scripted materials provided to TAs clearly cannot replace these practices in ensuring a high quality learning experience. Acknowledging TAs as pedagogical practitioners and providing them with the associated autonomy to adjust planning and respond to the developing learning needs of individuals and groups is more likely to encourage these practices. However, there is evidence that the knowledge and skills required by TAs to achieve this are not yet in place. Therefore:

1. A comprehensive national training and continuing professional development (CPD) programme (incorporating both pedagogical and subject knowledge) is required for TAs who are involved in the delivery of literacy intervention sessions for pupils who are falling behind their peers in relation to national expectations in literacy.

2. Training and support for TAs needs to support them in developing awareness of and use of oral strategies in relation to other initiated repair which fosters independence and the organisation of turns to develop interthinking. It is suggested that TAs would benefit from examining their turn-by-turn interactions with pupils in detail.

TAs need to understand and be able to support and develop a complex set of knowledge and skills:

- Specific literacy skills (subject knowledge);
- Specific scaffolding techniques (to provide expert scaffolding);
- Metacognitive awareness (to support and develop self-scaffolding);
- Interactional turn taking and interthinking (to support and develop reciprocal scaffolding);
- Links between pupils' own experiences and the context of the instructional experience.

Subject knowledge is not discussed specifically in this study, although studies by others have demonstrated that this is an area in which TAs require additional input (Blatchford *et al*, 2009d; Radford, Blatchford and Webster, 2011; Rubie-Davies *et al*, 2010). In terms of pedagogy, it is suggested that TAs require training in orienting to the learning rather than the organisational principle of the task; they need to develop an understanding of learning as more than 'acquisition of procedures' (Wood 1988, p. 294). This training is essential as, however detailed the planning TAs are working with, there is clear evidence that moment-by-moment decision making is taking place, and must take place if the provision is to be responsive to individual pupils and the group. It is recommended that this is focused on the key concept of scaffolding: 'If the child succeeds, offer less help when next intervening. If he fails offer more help.' (Wood and Middleton, 1975, p. 185). This requires the ability to be able to firstly set small goals in relation to the overall task, and then the ability to negotiate and renegotiate progress towards them (Rodgers, 2004; Tharp and Gallimore, 1988). Ongoing training and support for TAs is needed in knowing when to use (and how to develop) different types

of scaffolding practices. In relation to the individuals and groups they are working with, this requires training in building a picture of the ‘performance characteristics’ of the learner/s at that specific moment in time (Wood, Bruner and Ross, 1976). In this way materials can be fine tuned to provide a better fit with the specific needs of individuals and the group.

There are links here with the focus in schools on Assessment for Learning (AfL), the former National Strategy definition of which was taken from the Assessment Reform Group:

‘the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there’

(Assessment Reform Group, 2002)

Much AfL input for teachers has been focused on assessment of achievement against a specific objective (following the completion of a task). However, in this instance the focus needs to be on the feedback given on a moment-by-moment basis against the ‘small goals’ set during a task (on a moment-by-moment basis), particularly using the follow up move as an initiation of explanation, expansion or self repair. Sufficient training is therefore required for TAs to understand the links between learning and talk, with a particular emphasis on opening up pupils’ contributions to topical pursuit; the types of repair strategies which are available for use; and how pupils’ orientation to repairs can be monitored. This needs to be linked to a focus on the ongoing assessment of where the pupil is at each point in the interaction so that failures to orient to repairs are addressed consistently. This would support TAs in considering, for example, the appropriateness of using correction as a strategy. Correction as a form of ‘help’ is least likely to promote learner independence (Radford, 2010b) and it can be argued therefore that the training of TAs in when and how to withhold correction is particularly appropriate in relation to this aspect of interaction. Alongside this, training needs to include the use of strategies for developing pupils’ self repair skills. Ideally this would be through the analysis of video recordings made of their own teaching sessions, where TAs could be helped to identify the range of possible repair strategies which they could use in response to errors in reading or writing and discuss which would be the most pedagogically sound. When and how to use reciprocal scaffolding, and developing the

skills of interthinking between pupils, would also be a beneficial training focus; this can be done by training TAs in the key components of dialogic talk (as discussed, key to developing metacognition and self repair practices). However, as well as understanding and using dialogic talk, they would also need training in how to develop these skills with the group they are working with. To do this effectively requires an understanding that the substantive content and linguistic/interactional content can be separated and worked on separately.

A coordinated national training programme for TAs is recommended, requiring sufficient funding. Blatchford *et al* (2009c) found that 90% of TAs attended school INSET. Therefore this may be a way of providing some aspects of training and ongoing development. However, any school based programme would need to carefully assess the specific levels of understanding and the needs of participants. Clearly the training needs of teachers and TAs are likely to overlap in some areas (key aspects of dialogic talk for example) but contextually be very different as TAs spend the majority of their time working with groups and individuals. In addition, as Webster *et al* (2010a) argue, teaching pupils with SEN takes a higher level of skill and although the pupils in intervention groups are not those identified as having SEN, they are at significant risk of falling behind. It can therefore be argued that teaching these pupils would require a greater degree of skill than teaching those pupils who are progressing at the expected rate. Therefore TA specific training would be appropriate, and would need to be sustained, as shorter training programmes have been shown to lead to a continued focus on procedures rather than students' behaviours (Pinnell *et al*, 1994).

The author argues that ongoing CPD, using video data routinely collected by the TA during intervention sessions, is essential to support the development and embedding of understanding in relation to both specific scaffolding techniques and interactional strategies. The use of video analysis has been established as part of programmes such as reading recovery, and suggested for use in CPD for teachers (Smith *et al*, 2004). Video has the benefits of being 'real' rather than theoretical, and allowing the practitioner to focus on their own practice within their own context. For TAs it can be argued that the use of video is essential as the key to improving the learning experiences of the pupils that they work with is in the moment-by-moment interactions which can only be studied through video. The costs of the technology is manageable in relation to

school budgets (a very simple to operate 'flip camera', providing reasonable picture and audio quality, is available at the time of writing for under £100). The author has used video analysis with practitioners, and has concluded that a short piece of video can be transcribed and analysed, and conclusions drawn for implementing in the next teaching session in under 30 minutes, making it a time efficient process. If well focused as part of a continuous development process this would become increasingly useful as a tool for refining practice.

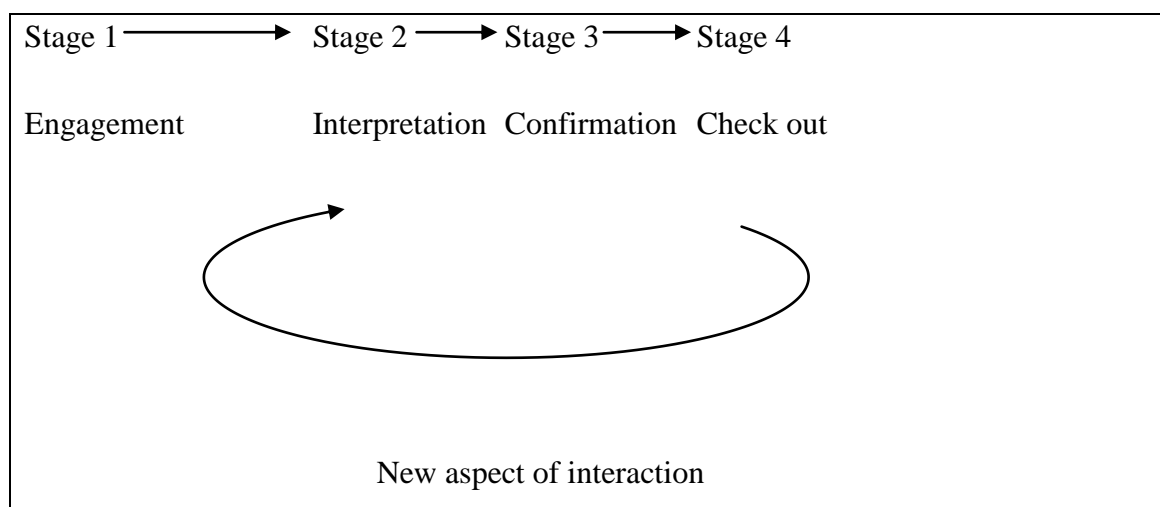
Scaffolding as a concept is equally as applicable to the learning (professional development) of TAs as it is to the learning of the pupils they work with (Tharp and Gallimore, 1988). It can therefore be conceived of as a four stage process, mirroring that outlined by Wood, Bruner and Ross (1976):

1. Engaging the TA in the process.
2. Interpreting discrepancies.
3. Confirmatory role.
4. Checking out.

Asking any professional to video themselves and then watch and discuss this with another (stage 1) is potentially challenging. A recent study using video as a CPD tool with groups of teachers found much 'face saving' activity taking place (Lefstein and Snell, 2011). There are ways in which this might be mitigated however. For example, TAs could pre-watch and choose which video sections to bring for analysis. They might initially work one to one with a specialist professional, rather than in a group. The role of the specialist professional at first would be to help interpret discrepancies (stage 2) in relation to the aspect of interaction being considered, engaging the kind of assisting performance practices discussed by Tharp and Gallimore (1988) such as modelling, feedback, questioning and cognitive structuring. This role over time would become a more confirmatory one (stage 3) before the TA is 'checked out' to continue to analyse the video data for similar instances to work on. Stages 2, 3 and 4 would be recursive steps as new aspects of interactional analysis become the focus. Stage 1

would require initial support but should then be secure in relation to each new aspect. The whole model of CPD, based on the principles of scaffolding is shown in Figure 3.

Figure 3: A CPD model for TAs



It is possible that the kind of video analysis work described could be undertaken as a paired exercise between TAs and teachers. However, there are a number of issues which need consideration. Firstly, although there is evidence from Radford, Blatchford and Webster (2011) that teachers have dialogic teaching skills which might be usefully shared with TAs, there is evidence that the skills of teachers are not consistently good in this area (Smith *et al*, 2004). Teachers have also been shown to be under prepared for a role in supporting and developing TAs (Blatchford *et al*, 2009a). In addition, there is the potential for TAs to see this as a process of being told what to do rather than building a shared understanding through dialogue and this may prohibit the kind of open dialogue needed. TAs do though feel underprepared for their pedagogical roles (Blatchford *et al*, 2009a) and are therefore likely to be open to this kind of support if done sensitively. Cremin, Thomas and Vincett (2005) have suggested that a 'reflective teamwork' model between teachers and TAs has helped to break down this thinking. A suitable way forward may be to develop programmes on a school by school basis which highlight which aspects of training can be shared, and then provide more role specific ongoing CPD. This could build towards supporting teachers and TAs to develop a reflective teamwork model as a process which could be used as the basis for self sufficient ongoing development.

8.3.2 Management

TAs are the most expensive resource available to a teacher. The management of TA provision within a school therefore needs to maximise their contribution to the learning experience. Relevant training and CPD is, as discussed, essential. In addition it is suggested that:

1. TAs need a clearly defined job description which is based on pedagogical principles rather than pragmatism. This will be different depending on the specific role the TA is expected to undertake (such as general and specific support).
2. Time needs to be provided for TAs to liaise with class teachers who need to be trained to manage their work.
3. Expectations in relation to TAs' interactions with pupils need to be set and monitored.

There are different ways in which the work of TAs needs to be managed. Day to day management of TAs needs to be by class teachers (rather than a literacy coordinator/SENCo) in relation to literacy intervention sessions. Class teachers have the overall responsibility for the pupils in their class who attend these sessions, and are best placed to monitor their *progress* across stages of development. This monitoring is likely to draw on a wide range of evidence to determine trajectories over time, one aspect of which will be the intervention sessions. The TA is involved in the *learning*, defined by Bickhard (2005) as focusing on 'in-the-moment constructions' (p.168). If this is clearly defined in role descriptions, then the nature of the liaison required between the two parties becomes evident. TAs would be responsible for providing information about the day to day learning experiences of the group and of individual pupils, and for adjusting planning (in terms of the smaller learning goals set) during the session; the teacher would be responsible for producing planning which takes into account the overall trajectory of individuals and the group. This would go some way towards establishing the role of the TA as distinctly pedagogically different to that of the teacher. It would also support integration of intervention sessions with the classroom curriculum and may help to move away from a focus on task completion

during these sessions. Without effective liaison between TAs and class teachers, the only evidence of an individual pupil's or group's engagement is the written responses to tasks. This may be contributing to a focus by TAs on task completion.

One way of achieving this team working would be to jointly use video data as an AfL resource. This would support TAs in reviewing the engagement with the learning experience of individuals and the group, and specific needs which occurred in terms of repair. This in turn would support teachers in building an ongoing picture of the performance characteristics of individuals and groups, in order to inform ongoing planning. Marking and assessment carried out by the TA during and after sessions could also be considered in these liaison sessions. This may also minimise the 'training gap' effect referred to by Causton-Theoharis *et al* (2007), by ensuring that the teacher provides ongoing liaison and support. This level of liaison clearly has implications in terms of time. 'New' time will need to be found in schools for this, as currently less than one quarter of TAs have allocated time for planning or feeding back with class teachers (Blatchford *et al*, 2009c). Again, this requires recognition that monetary investment in a TA to deliver intervention sessions is only cost effective if it is part of a conceptual rather than pragmatic model based on sound pedagogical principles. General TA support would be likely to benefit from this approach, but it is argued that it is particularly important to secure this in relation to targeted support such as intervention sessions.

There are also wider management implications. It is recommended that TAs are involved in the monitoring and evaluation procedures in schools. Although the class teacher holds overall responsibility for the pupils in their class, TAs who teach intervention sessions (where they have received appropriate training and ongoing support and management) need to be held responsible for ensuring that all pupils are engaged in a quality learning experience which meets teaching and learning expectations. Having lesson observations and appraisal procedures are essential to highlighting good practice and areas for development. Rubie-Davis *et al* (2010) conclude that: 'models of effectiveness when applied to teachers will also need to be applied to TAs' (p. 446). Certainly the author would concur that models of effectiveness need to be applied. However, it would seem appropriate that these are not exactly the same as those applied to teachers. There may be some overlap, but the

context of group size and nature of the interactions mean that not all aspects of effectiveness that teachers might be judged by would be appropriate to the TA. Conversely, it is likely that TAs would need to be using moment-by-moment scaffolding skills much more frequently than teachers; this aspect would therefore need to be more prominent in these judgements.

There is also a need to monitor and evaluate progress of pupils taking part in Wave 2 interventions, which is currently lacking in schools (Tanner *et al*, 2011). Where these programmes are not supporting pupils in ‘catching up’ with their peers within the expected timeframe, all possible reasons need to be examined and addressed.

8.3.3 Policy

The role of the TA is one which has grown on an *ad hoc* basis, and there is evidence from this and other studies that there needs to be a fundamental review of the role. In addition, Wave 2 interventions have been used in schools in an *ad hoc* way (the scripted nature of the materials perhaps adding to the illusion that they can be delivered without any preparation, liaison or support), with TAs being insufficiently prepared for delivering these and the programmes not adequately monitored and evaluated either by schools themselves or external inspections such as Ofsted. Bearing in mind these factors, it is not perhaps surprising that the quality of pupils’ engagement in the learning experience, as found in this study, is often poor. Therefore:

1. There need to be discussions at both a national policy level and a local school level on the role of the TA in relation to the development of pupils’ literacy.
2. The policy of group delivery of scripted literacy intervention sessions needs to be reconsidered.

The role of the TA as overlapping but essentially different to that of the teacher needs to be clearly recognised and spelt out in policy texts. Currently in relation to Wave 2 intervention sessions TAs are being used instead of teachers, on the premise that they are delivering pre-prepared materials. However, the use of pre-prepared materials may contribute to the emphasis on the amount covered rather than the quality of the learning experience. Where interventions are designed to last a specified number of weeks and cover set reading vocabulary (as is the case with both the ELS and ALS sessions), there

is a built in necessity for pace, which may disadvantage individuals or groups requiring more time to develop self-scaffolding strategies and semantic understanding. Policy which allows greater flexibility over the planning and implementation of sessions could support a greater focus on the learning on a turn by turn basis. This would require a clear conceptualisation of TAs at a policy level as pedagogical decision makers, not as deliverers of a product. It is been argued here that providing an effective learning experience is not possible without scaffolding, and scaffolding *requires* in the moment pedagogical decision making. Evidence from the data is that TAs are making pedagogical decisions on a moment-by-moment basis; it is therefore recommended that this needs to be recognised and supported through policy development. However, it is argued that this needs to be clearly differentiated from the role of the teacher, which it is suggested should be pedagogical and curriculum planning in relation to intervention sessions. The author therefore concurs with the argument by Webster *et al* (2010a) that teachers should take back the responsibility for lesson by lesson *planning*, but not with Causton-Theoharis *et al* (2007) that TAs ‘should not be put in the inappropriate position of making pedagogical decisions’ (p. 58). It is the timeframe of these decisions which is the key point – moment-by-moment decisions (what Seedhouse (2010) terms ‘actual pedagogy’) need to be specified as the responsibility of the TA, whereas between session (planning) decisions need to be the responsibility of the teacher. Bearing in mind the complex knowledge and skill set required to scaffold learning in intervention sessions, a case can certainly be made for policy which specifies that specialist TAs should undertake this provision (as suggested by Rose, 2009). Clarification of the role in policy documents needs to be accompanied by clarification that TAs are expected to have a direct impact on pupil attainment.

The data shows that there is a tendency for TAs to interact with individual pupils when difficulties occur, and actively discourage other members of the group from becoming involved in repair sequences when a pupil is experiencing difficulties. In these cases interactions would be better described as one to one tutorials rather than group sessions (pupils happen to be sitting in a group but are not engaging in group interactions or orienting to the learning of others in the group). Therefore it could be considered whether it would be more cost effective for pupils who are falling behind in literacy to have fewer intervention sessions with TAs, but for these to be focused one to one

tutorial sessions. The alternative (one which would be suggested by the literature on the benefits of effective group interaction for learning) would be to base materials around dialogic teaching techniques designed to support the development of interthinking. This cannot be separated from consideration of the overall intended purpose of intervention sessions. Blatchford *et al* (2003) suggest that:

'...group work is probably best suited to learning processes which involve giving up or transcending current levels of understanding to reach a new perspective, rather than learning processes which involve the acquisition of new skills or strategies, or the individualism associated with practice-based tasks.'

(np)

Therefore, questions need to be asked at a policy level regarding the purpose of intervention programmes. If the purpose is to help pupils to acquire specific skills or strategies (for example, learning initial letter sounds in phonics) then interactional practices which mirror whole class teaching techniques may be most appropriate; this would require the TA to be focused on the learning of the group as a whole rather than focusing on individual pupils. If the focus is on practising the use of these skills and strategies (for example, applying phonic knowledge to reading) then individual tuition would be more appropriate; this would allow for detailed, individualised assessment and support). If the role of intervention programmes should be (or in part be) to develop reading comprehension or compose texts then serious consideration is needed to raising the profile of dialogic talk as topic generation and extension is a key component. In all of these cases then there would need to be a reconceptualisation of intervention programmes. A purpose and clear pedagogical rationale is needed, with appropriate training and support in the associated teaching methods. If it is considered appropriate for more than one learning process to be supported in a group interaction situation, then it may be that clearer guidelines need to be provided in order to support both teachers and pupils in moving between them. All participants would need to be aware of the learning goals associated with each activity type used in the session, and the associated turn taking organisation.

Chapter 9 Conclusion

9.1 Summary of the project

This study has provided new and significant evidence in relation to the moment-by-moment interactions between TAs and pupils during literacy intervention sessions, an area not previously covered by empirical study. It has developed emerging theory using Conversation Analysis (CA) as an analytic approach, based on robust collections of interactional instances taken from naturally occurring data. This shows that TAs as ‘deliverers’ of literacy sessions focus on task completion, providing high levels of support in relation to the individual difficulties experienced by members of the group; the ‘handover’ (Bruner, 1983) or ‘fading’ (Wood and Wood, 1996) of the responsibility for task completion is generally lacking. Turn taking and topic practices also focus on task completion and fail to offer opportunities for dialogic engagement of pupils. In relation to the types of scaffolding suggested by Holton and Clarke (2006) pupils are potentially remaining dependent on the adult, not taking over responsibility for task completion (during expert scaffolding), and also not developing the interactional and metacognitive skills required to use other pupils as a learning resource (reciprocal scaffolding) and to self monitor and self repair troubles (self-scaffolding). Pupils therefore become reliant on an adult supplying corrections and high levels of support.

It has been argued that there is significant potential for the pupil to become increasingly reliant on adult support over a period of time, whilst initially appearing to be making progress with their learning. The longer term implications of these practices are that the pupil becomes dependent on one to one adult support, experiencing difficulties in accessing normal classroom provision. There is a distinct possibility here that they may be identified as having Special Educational Needs (SEN), but that this has actually arisen **because** of the provision provided to try and ensure they catch up with their peers. The percentage of pupils identified as School Action or School Action Plus (having SEN but not given a statement) has risen. For example, it stood at 14.0% in 2003 rising to 18.2% in 2010 (Ofsted, 2010b). Ofsted have concluded that at least half of those pupils on School Action do not have SEN but ‘simply need better teaching’ (p. 8). TAs form part of this teaching provision, both in relation to intervention sessions (specific support) and general classroom based support and this study has recommended

that there needs to be a focus on developing an oral pedagogy framework (which includes paralinguistic and non-verbal practices such as gesture) in order to improve the quality of moment-by-moment interactions. By improving the quality of the learning experience in intervention sessions and in class support, pupils' ability to benefit from whole class literacy teaching should be increased.

This study also adds to the wider body of knowledge in the area of classroom interaction in three ways. Firstly, through the information provided in relation to development of turn organisation; this is applicable to the study of interaction and task design in any classroom interaction context. Secondly, the study supports comparison between the turn organisation, repair and topic practices of TAs and other adults working with pupils (such as class teachers or specialist support). Lastly, it provides information on the ways in which pupils are actively involved in securing high level support from adults. Again, this is likely to be applicable to a range in contexts. Perakya (2006) argues that the key point of CA studies is that they should aim to 'enhance dialogue' (p. 176), something which has been done in this study through developing new theory in relation to the specific context studied and providing a new perspective on existing theory in other contexts.

9.2 Reflections on the research design and methods used

The design was a multiple-case study, collecting observational data of naturally occurring episodes (literacy intervention sessions involving TAs and small groups of pupils) through video recording. Some secondary, contextual data in the form of teaching materials, questionnaires, and interviews were also collected. In the event however, these did not form part of the analysis as it soon became apparent that it was theory in relation to the moment-by-moment interactions which was key to improving the learning experiences of pupils. The only feasible way to begin to build theory therefore was through naturalistic observation and fine grained analysis of interactional episodes. In this sense the analysis of the practices in use was more one of pure CA than a broader linguistic ethnographic approach. However, the implications of these practices for the learning experience of pupils required drawing on learning theories developed and discussed in this broader linguistic ethnographic arena. This ensured that

the study was able to make clear links and recommendations regarding the pedagogical role and practices of TAs.

The picture and sound quality of the recordings was good overall which allowed for more detailed and accurate transcription, adding to the reliability and internal validity. In line with common CA practice, a number of extracts were shared with groups and individuals familiar with the approach; this supported both the author's own developing CA skills and provided the opportunity for the validity of claims to be tested by others. This was particularly relevant in this study where transcripts needed to be produced which accurately showed the interactions of groups of up to six participants, which often involved overlapping speech and para-linguistic activities and gesture. Moving beyond the current study, developing transcription formats which effectively portray all of the relevant activities of all participants of a group will be a continuing area of development.

Certainly it can be argued that CA is not an approach which can be used with large scale data sets, but is ideal for theory building, and for unpacking instances of interest in detail. It has proved to be highly effective in doing this as it is only by analysing the moment-by-moment connections between all aspects of interaction (linguistic, para-linguistic and gesture) that the practices undertaken can be fully mapped out and an emic perspective achieved. It was found that something as simple as a pupil's hand being put up or down at a certain point (easily overlooked in other types of analysis) led to understanding exactly why a significant repair issue arose. The phrase 'why that now?' becomes key in unpicking the complexities of the interactions as lived by participants once it is understood that every action performs a function in the interaction.

The opportunistic sample was formed of eight groups, which included 4 different TAs across 3 schools and using a range of government or local authority literacy intervention materials. For this type of theory building work this offered a reasonably large amount of data, with the fact that similar practices were found across the cases adding very significantly to the external generalisability of the data (Yin, 2009). Whereas it cannot be assumed that all interactions in intervention groups share the same practices as those established in this study, this study does offer a framework for considering how certain

aspects of talk-in-interaction in similar circumstances might operate (Perakyla, 1997; Robson, 2002). Importantly, during the time in which the study has been undertaken, one key study has emerged (Radford, Blatchford and Webster, 2011), also using CA as an approach but in the context of whole class mathematics sessions. This found many of the same practices to be in place. That two studies carried out independently in different contexts (in relation to subject, age group of pupil, location of the lesson and the type of activity) have found these same practices again adds very significantly to the external generalisability.

9.3 Ways forward

One way in which the current study could be taken forward would be to expand the sampling to a wider population, whilst keeping the activity context (literacy intervention sessions using scripted materials) the same. This would continue to develop the generalisability of the theory developed in this study. In addition, as similar interactional practices have been found to be in use by TAs and pupils in other mainstream contexts (Radford, Blatchford and Webster, 2011), the generalisability could be further extended through sampling which considers a variety of types of activity, subjects, and ages of pupils. Population characteristics of TAs such as experience, and access to training may also be an area which could be considered in relation to sampling, particularly when considering the extent to which appropriate CPD may be a factor in improving the learning experiences for pupils. An additional area of interest would be to consider the perceptions of TAs and teachers in relation to the moment-by-moment interactions, and intervention sessions generally. This may offer some insight into how the participants interpret what is happening (and should be happening) in these sessions.

The focus of much recent research has been on the content and structure of literacy interventions, with most focused on the decoding aspect of early reading. To date these studies have focused on quantitative data; the moment-by-moment interactions during these sessions may go some way to fine tuning these materials. The government appears to have accepted the recommendations of Rose (2009) in relation to pupils with learning needs who are not identified as having SEN. This will include introducing phonics-based training for pupils needing additional support in reading (DfE, 2010b)

and is likely to include the transition to the open market of the Every Child programmes (DfE, 2011b). With Wave 2 interventions being those identified as the weakest aspect of the Every Child a Reader programme (Tanner *et al*, 2011) this would be an ideal time to work on redeveloping group intervention aims, approaches and materials considering interactional practices as a key part of this.

The most pressing area in which further work is required is in clarifying the TA role in relation to pedagogy. Here it is argued that the role of the teacher should be in relation to the overall developmental trajectory of individuals and the group (in addition to their role in scaffolding learning in interactions with pupils), whereas that of the TA should **only** be in relation to scaffolding the moment-by-moment progress of pupils towards smaller learning goals. The development of an oral pedagogy for TAs is therefore urgently required. The theory which has been developed in this study provides a starting point for developing a framework for examining interactions and clarifying what this might incorporate. Scaffolding needs to respond very precisely to the previous action; therefore understanding the links between actions by participants becomes the means to describe, analyse and improve scaffolding practices. If the specific interactional practices by which scaffolding can be achieved form the basis of training and ongoing CPD, this has the potential to improve *all* learning interactions between TAs and pupils, whether general or specific. It would also offer the basis for improving liaison between TAs and class teachers, and a focus for observation and accountability measures.

It has been acknowledged by the current government that ‘for teaching assistants to have a positive impact they need to be trained, supported, deployed and managed effectively. ‘ (DfE, 2011, p. 64), and it has been made clear that the means for achieving this will not be provided or prescribed centrally; each school or group of schools will be responsible for providing these, and will decide on roles and pay of TAs (DfE, 2010b; DfE, 2011). Moving forward, this study provides the basis for further work in developing the frameworks for training and supporting TAs in developing an oral pedagogy and for improving deployment and management practices in relation to this.

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Appendix 1: List of acronyms and capitalisations

AfL	Assessment for Learning
ALS	Additional Literacy Support
BERA	British Educational Research Association
CA	Conversation Analysis
CPD	Continuing Professional Development
DCSF	Department for Children, Schools and Families
DfE	Department for Education
DfEE	Department for Education and Employment
DfES	Department for Education and Skills
DISS	Deployment and Impact of Support Staff
DIU	Designedly Incomplete Utterance
DVD	Digital Versatile Disc
EcAR	Every Child a Reader
ELS	Early Literacy Support
FLS	Further Literacy Support
HLTA	Higher Level Teacher Assistant
HMI	Her Majesty's Inspectorate
INSET	IN-SERVICE Training
IRE	Initiation-Response-Evaluation
IRF	Initiation-Response-Feedback
IZD	Intermental Zone of Development
KS	Key Stage
LA	Local Authority
LE	Linguistic Ethnography
LSA	Learning Support Assistant

LSC	Learning and Skills Council
NC	National Curriculum
NLS	National Literacy Strategy
NNS	National Numeracy Strategy
NVQ	National Vocational Qualification
Ofsted	Office for Standards in Education
OIOR	Other-Initiated Other Repair
OIR	Other-Initiated Repair
OISR	Other-Initiated Self Repair
OR	Other Repair
ORACLE	Observation Research and Classroom Learning Evaluation
PAL	Positive Approaches to Learning
PNS	Primary National Strategies
PPA	Planning, Preparation and Assessment
QTS	Qualified Teacher Status
RI	Repair Initiator
RR	Reading Recovery
RT	Reciprocal Teaching
SEN	Special Educational Need
SENCo	Special Educational Needs Co-ordinator
SIOR	Self-Initiated Other Repair
SISR	Self-Initiated Self Repair
SR	Self Repair
SSLD	Specific Speech and Language Difficulties
SLT	Speech and Language Therapist
SWDB	School Workforce Development Board

TA	Teaching Assistant
TCU	Turn Construction Unit
TDA	Training and Development Agency
TL	Teacher Leader
TRP	Transition Relevance Place
TTA	Teacher Training Agency
UK	United Kingdom
ZPD	Zone of Proximal Development

Appendix 2: Questionnaire for line managers

Questionnaire for THE PERSON WITH OVERALL RESPONSIBILITY FOR TAs (Eg Headteacher, deputy headteacher, assistant headteacher, SENCO)

As part of my doctoral study I am carrying out a survey to find out information about Teaching Assistants and their role in supporting children's learning through the teaching of literacy intervention programmes. This is an important area about which little information is available. I would therefore be grateful if you could complete the questionnaire below. Please note that TA has been used as a generic term, covering all adults other than teachers who work supporting children.

Please tick the boxes as indicated and add brief comments where appropriate. Your responses will be treated in confidence.

If you have any questions regarding the questionnaire, please contact Paula Bosanquet (contact details were provided here).

Please return your completed questionnaire in the prepaid envelope provided to arrive by Friday 11th May, or as soon as possible.

If you would like your school to become more involved in this project please give your details below. I am planning to work with a small number of schools to analyse in more depth the processes of teaching and learning in ELS/ALS groups. This would involve videoing and discussing teaching with your TAs, therefore offering a unique opportunity for their professional development.

Your name:	Contact Telephone Number:
School Name:	

ABOUT YOUR SCHOOL

1. What type of school is it?

Infant ☐ Junior ☐ Primary ☐

2. How many classes are there in each year group in KS1 and 2?

1 ☐ 2 ☐ 3 ☐ 4 ☐

Other (eg details of mixed year group classes)

ABOUT YOUR TAs

3. a). How many TAs are employed in your school?

In KS1_____ In KS2:_____

b). How many of these are HLTAs?

In KS1_____ In KS2_____

4. a). How many TAs are involved in the direct teaching of groups of children for literacy using intervention materials (eg ELS/ALS)?

In KS1_____ In KS2_____

b). How many of these are HLTAs?

In KS1_____ In KS2_____

5. a). How many TAs are involved in the direct teaching of groups of children for literacy from the teacher's planning (i.e. **NOT** using ELS/ALS materials)?

In KS1_____ In KS2_____

b). How many of these are HLTAs?

In KS1_____ In KS2_____

ABOUT YOUR ELS/ALS GROUPS (OR OTHER LITERACY INTERVENTION PROGRAMMES WHICH USE SCRIPTED MATERIALS)

6. How many groups of children do you currently have being taught on literacy intervention programmes?

ELS_____ ALS_____ Other (please also name programme)_____

If you have entered zero in each of the above spaces, please go to question 11

7. Who selects the children for inclusion in a group? (please tick all that apply)

Class teacher ☐

SENCO ☐

Literacy coordinator ☐

Assessment coordinator ☐

Other (please specify)

8. Who liaises with TAs regarding the planning and teaching of intervention programmes? (please tick all that apply)

Class teacher ☐

SENCO ☐

Literacy coordinator ☐

Assessment coordinator ☐

Other (please specify)

9. (a) Do you feel that there is enough opportunity for staff to discuss the intervention programmes with TAs?

Yes ☐ Some of the time ☐ No ☐

(b) Please explain why

10. (a) As a school do you ever adapt any of the ELS/ALS materials?

Yes ☐ Some of the time ☐ No ☐

(b) Please explain why and how

SUPPORT AND TRAINING FOR TAs

11. Which of the following in-school support and development opportunities do you provide for TAs? (*Tick one box for each row*):

	Regular	Occasional	Have not provided
Progress meetings with HT/AHT/DHT/mentor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole school planning meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
INSET meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related specifically to the literacy Intervention materials (ELS or ALS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other in-school development for TAs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please specify</i>)			

12. Which of the following external training and development opportunities do you expect your TAs to attend? *(Tick one box for each row):*

	Regular	Occasional	Not expected
Teaching assistant training courses run by the authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related specifically to the literacy Intervention materials (ELS or ALS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other staff training courses run by the Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching assistant and teacher training run together by authority (eg on team working)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related to the HLTA award	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other college-based training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other <i>(please specify)</i>			

13. How are external training opportunities communicated to your TAs? (please tick all that apply)

Noticeboard ☐ Staff meetings ☐ Word of mouth ☐

Other (please specify) ☐

14. Does the school include TAs in monitoring procedures (eg observations of teaching; performance management)?

No ☐

Yes (please specify how) ☐

IN CONCLUSION

16. (a) Please use this space to note any current concerns or other comments you have about the use of a Teaching Assistants. In particular, any comments that you have regarding the ELS/ALS materials and your use of them would be very welcome.

**Thank you for taking the time to give me your views.
Please return your completed questionnaire in the prepaid envelope provided.**

Appendix 3: Questionnaire for TAs

Questionnaire for TEACHING ASSISTANTS WHO TEACH ELS or ALS

As part of my doctoral study I am carrying out a survey to find out information about Teaching Assistants and their role in supporting children's learning through the teaching of literacy intervention programmes. This is an important area about which little information is available. I would therefore be grateful if you could complete the questionnaire below. Please note that TA has been used as a generic term, covering all adults other than teachers who work supporting children.

Please tick the boxes as indicated and add brief comments where appropriate.
Your responses will be treated in confidence.

If you have any questions regarding the questionnaire, please contact Paula Bosanquet (contact details were given here).

Please return your completed questionnaire in the prepaid envelope provided to arrive by Friday 11th May, or as soon as possible.

If you would like to become more involved in this project please let your line manager know (headteacher, SENCO or literacy co-ordinator). This would involve videoing and discussing your teaching with you, offering a unique opportunity for your own professional development.

ABOUT YOU

1. Are you: Female? ☐ Male? ☐

2. Are you: under 25? ☐ 25-34? ☐ 35-44? ☐ 45-54? ☐ 55+? ☐

3. Do you have any qualifications in childcare and/or education? (*Tick all that apply*)

	Yes	No
CSE/GCSE	<input type="checkbox"/>	<input type="checkbox"/>
NVQ	<input type="checkbox"/>	<input type="checkbox"/>
BTEC	<input type="checkbox"/>	<input type="checkbox"/>
NNEB	<input type="checkbox"/>	<input type="checkbox"/>
HLTA	<input type="checkbox"/>	<input type="checkbox"/>
Foundation Degree	<input type="checkbox"/>	<input type="checkbox"/>
Degree	<input type="checkbox"/>	<input type="checkbox"/>
Teaching	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please specify</i>)		

4. What other qualifications do you hold?

	Yes	No
O level/CSE/GCSE	<input type="checkbox"/>	<input type="checkbox"/>
AS level	<input type="checkbox"/>	<input type="checkbox"/>
A level	<input type="checkbox"/>	<input type="checkbox"/>
NVQ	<input type="checkbox"/>	<input type="checkbox"/>
BTEC	<input type="checkbox"/>	<input type="checkbox"/>
Foundation Degree	<input type="checkbox"/>	<input type="checkbox"/>
Degree	<input type="checkbox"/>	<input type="checkbox"/>
Post-graduate degree	<input type="checkbox"/>	<input type="checkbox"/>

Other (*please specify*)

THE TEACHING ASSISTANT POST

5. How many hours per week do you work as a Teaching Assistant?

1-5 hrs ☐ 6-10 hrs ☐ 11-15 hrs ☐ 16-20 hrs ☐ 21-25 hrs ☐ More than 25 hrs ☐

6. (a) How many ELS or ALS groups are you working with this term? _____

(b) Please indicate below the number of groups in each Key Stage:

Key Stage 1 _____

Key Stage 2 _____

(c) Approximately how many children in each group? _____

7. How long have you been working with groups using the ELS or ALS materials?

This is the: 1st year ☐ 2nd year ☐ 3rd year ☐ 4th year ☐ 5th year or more ☐

WHAT YOU DO

8. (a) Which of the following describe how you liaise with others regarding the planning and teaching of the ELS/ALS materials? *(Tick all that apply)*

I meet with the teacher(s) regularly ☐

I meet with the teacher(s) occasionally ☐

We liaise informally at breaks etc. ☐

There is a diary/notebook for communication ☐

I meet with the SENCO regularly ☐

I meet with the SENCO occasionally ☐

Other *(please specify)*

9. (a) Do you feel that you have enough opportunity to discuss what you are doing with the teacher(s)?

Yes ☐ Some of the time ☐ No ☐

(b) Please explain why

10. (a) Do you ever adapt any of the ELS/ALS materials for your groups?

Yes ☐ Some of the time ☐ No ☐

(b) Please explain why

SUPPORT AND TRAINING

11. Which of the following in-school support and development opportunities have you had? (*Tick one box for each row*):

	Regular	Occasional	Have not had this
Progress meetings with HT/AHT/DHT/mentor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Whole school planning meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
INSET meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related specifically to the literacy Intervention materials (ELS or ALS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other in-school development for TAs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please specify</i>)			

12. Which of the following external training and development opportunities have you had? (*Tick one box for each row*):

	Regular	Occasional	Have not had this
Teaching assistant training courses run by the authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related specifically to the literacy Intervention materials (ELS or ALS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other staff training courses run by the Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching assistant and teacher training run together by authority (eg on team working)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training related to the HLTA award	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other college-based training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please specify</i>)			

13. How many hours training would you estimate that you have had in total in relation to the ELS or ALS materials? _____

14. (a) What have you found to be the most useful type of support and/or training?

(b) Please list any other support or training you would particularly like.

15. Do you have any aspirations to develop your career further in any of the following ways?
(Tick one box for each row)

	In the next year or two	In 3-5 years time	Not in the foreseeable future
Further training and qualifications relevant to TAs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursery nurse training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FDTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HLTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teacher training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I intend to develop my career in another field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)			

IN CONCLUSION

16. (a) Please use this space to note any current concerns or other comments you have about being a Teaching Assistant. In particular, any comments that you have regarding the ELS/ALS materials and your use of them would be very welcome.

Thank you for taking the time to give me your views.
Please return your completed questionnaire in the prepaid envelope provided.

Appendix 4: Consent form for TA

I am planning to carry out some research at your school, which will aim to collect new information about the interactions between teaching assistants and children during literacy intervention sessions. It is hoped that this will support training both within and outside of the school, and also contribute to the wider body of knowledge in this area. It will involve making video and audio recordings of the literacy intervention sessions that you lead.

Transcripts made from the data will not use your name. However, it is obviously not possible to give anonymity in relation to video recordings, which may be used in the public arena to illustrate the research. All data will be kept securely.

I hope that you will be happy to sign the form below - if you have any concerns please do not hesitate to contact me.

Yours sincerely

Name.....

I give consent for my voice and image to be recorded onto video and/or audio tape.

I also give consent for my voice and image to be used for training purposes and to illustrate the research in the public arena.

I understand that data may be made available to other researchers for the same purpose as the original data collection.

I understand that I have the right to withdraw from the research at any time.

Signed..... Date.....

Appendix 5: Consent form for parent/carer

Dear Parent/Carer,

I am planning to carry out some research at your child's school, which will aim to collect new information about the interactions between teaching assistants and children during literacy support activities. It is hoped that this will support training both within and outside of the school, and also contribute to the wider body of knowledge in this area. It will involve making video and audio recordings of sessions, and collecting information regarding attainment in literacy of the children involved.

Transcripts made from the data will not use the children's names. However, it is obviously not possible to give anonymity in relation to video recordings, which may be used in the public arena to illustrate the research. All data will be kept securely.

I hope that you will be happy to grant permission for your child to be included. However, if you have any concerns please do not hesitate to contact me.

Yours sincerely,

Paula Bosanquet

Re:..... (child's name)

I give consent for my child's voice and image to be recorded onto video/audio tape.

I also give consent for my child's voice and image to be used for training purposes and to illustrate the research in the public arena.

I understand that data may be made available to other researchers for the same purpose as the original data collection.

I understand that I have the right to withdraw my child from the research at any time.

Signed..... Date.....

Appendix 6: Glossary of transcription symbols

- (0.0) The number in brackets indicates a gap in the talk given by tenths of seconds.
- (.) A dot in parentheses indicates a gap in the talk of less than two tenths of a second.
- () Empty parentheses indicate the presence of an unclear fragment of tape.
- = The equals sign indicates no break or gap between utterances ('latching')
- [A left square bracket indicates the onset of overlap between utterances and/or non-verbal activities of two or more participants
-] A right square bracket indicates the end of overlap between utterances and/or non-verbal activities of two or more participants
- smiles* A description written in italics indicates a non-verbal activity.
- ::: Colons indicate that the speaker has stretched the preceding sound or letter. The more colons the greater the extent of the stretching.
- (yes) The words within a single bracket indicate the transcriber's best guess at an unclear utterance or speaker.
- ? A question mark indicates a rising inflection.
- ↑↓ Arrows indicate a marked shift into a higher or lower pitch. They are placed immediately before the onset of the shift.
- under Underlined fragments indicate speaker emphasis.
- CAP Words in capitals mark a section of speech noticeably louder than that surrounding it.
- °° °° Degree signs are used to indicate that the talk they encompass is spoken noticeably quieter than the surrounding talk.
- .hh A dot prefixed 'h' indicates speaker inbreath. The more h's the longer the breath.
- hh An 'h' without the dot indicates an out-breath. The more h's the longer the breath.